

THE READER

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UNIVERSITY COLLEGE, LONDON.—
FACULTY OF ARTS. Session 1865-6.

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CHARLES C. ATKINSON,

August, 1865.

Secretary to the Council.

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THE READER.

SATURDAY, SEPTEMBER 23, 1865.

GUISEPPE MAZZINI.

MR. MAZZINI is probably the most maligned man in Christendom. He has been persistently traduced by those who have not taken the trouble to make themselves acquainted with the principles of which he is the apostle; and has had the misfortune more than once to be misinterpreted even by those who incline to favour his cause. His career has been vicissitudinous in the highest degree. He began life, at an early age, as a man of letters, and it is to literature, we believe, he chiefly devotes himself now. But between the year 1828, in which, full of high hopes, he established the *Indicatore Genovese*, and the present time, when he confesses his soul to be dead to happiness, and withered by sorrows, delusions, and ingratitude, he has more than most men experienced sundry and manifold changes of fortune. Driven from his native land on account of his opinions, he takes up his abode at Marseilles; ordered to quit French territory, he seeks and finds refuge in Switzerland; returning thence into Italy, he is thrown into prison; escaping, he is again at Marseilles; then in London; then, upon the outburst of the last French Revolution, in Paris; then once more in Italy; then, a second time, obliged to fly to Switzerland. At length, Rome having declared herself a Republic, we find him in the Eternal City—Triumvir, ruler, dictator; organizing the army of the State; re-arranging its finances; establishing its foreign relations; and seeking to settle its disordered domestic affairs. His season of power was of short duration. After ninety days, the city was crushed by the cannon of a foreign nation, and he is once more an exile. During the whole of this time, however—sorely tried as he must have been in the furnace of affliction—Mazzini is not known to have misdeigned himself. According to the testimony of those most competent to speak, he has remained pure-minded, unselfish, faithful, truthful in the highest degree.

Why this man—enthusiastic, and possessing surprising vigilance—is a terror to the Courts of Europe, by whom he is not unjustly regarded as the petrel of revolution, is not difficult to be understood. Why he continues to be depreciated and defamed in England is less clear. His unpopularity in this country cannot arise from dislike of his opinions; or his lieutenant, Garibaldi, who shares them, would not have experienced the treatment he received from us during his visit. This general—this hand which had come to rejoin its head—was honoured during his stay in England with unprecedented attentions. Professional men, men of letters, Parliament men and noblemen, attended his *levées*; Cabinet Ministers undertook the charge of his health; and even the heir to the throne, representing Majesty itself, did not think it indecorous to pay him court. The streets through which he made his entry were thronged by an enthusiastic people; his outgoings and ingoings whilst amongst us were minutely chronicled by newspapers; and terms were employed in reference to him that would be too eulogistic if applied to the most famous heroes of antiquity. And yet this general obtained the success which brought him such unexampled honours by no

eminent display of political sagacity or military ability. The enemy against whom he went out proved to be a secret friend; and he entered the capital of the kingdom he invaded, like an English tourist would enter, in a carriage and pair. He was victorious solely because he was regarded by the Italians as the representative of the doctrines professed and preached by Mazzini.

How comes it, then, that the master is disparaged whilst the pupil is caressed? We believe there are two reasons for this inconsistency. In the first place, apart from the disavowed and disproved charge of being a patron of assassination, Englishmen accuse the triumvir of habitually inciting others to undertake dangers in which he declines to participate. The accusation is undeniably true; but the inference sought to be drawn from the fact is as invalid as would be an imputation of cowardice against our War Minister, for sending a regiment into action whilst he inhumanly smoked his cigar in Pall Mall. Mr. Mazzini, like the Minister of War, is a civilian; and, like him, probably believes that for thirteenpence-halfpenny a-day a thousand men may be found better qualified than himself to shoulder a rifle and endure the fatigues of a campaign; whilst, without much vanity, he may conscientiously suppose that neither of the thousand could serve his country so effectually as he by counsel and direction. In the second place, and chiefly, Englishmen are unable to appreciate Mazzini, from their inability to perceive a principle until it becomes embodied. They must have a personal representative of the qualities they admire, and must see an idea applied before they venture to approve it. Our press is never more happy than in ridiculing a nation that can be so silly as to go to war for "an idea;" and our House of Commons, generally credited with being an intelligent assembly, is never more unanimous than in voting against "abstract questions." Honourable members are not indisposed to entertain "questions;" indeed, they rather like "questions," and flatter themselves they understand "The Mexican question," or "The Eastern question," or "The Timbuctoo question." But the principle that covers any of these, that comprehends it and all similar questions, they resolutely refuse to discuss. They regard abstract resolutions with deeper abhorrence than that with which a Jew is said to regard pork.

Mr. Mazzini, on the other hand, claims notice as the originator and champion of certain principles, which he carries to their extremest consequences. He has no wish to be considered a statesman in our sense of the term. Unlike his countryman Paolo Sarpi, who preferred waiting for events, and "drawing from them the greatest possible profit for his ideas, to all attempts to determine their course and create facts through ideas," he aspires to be something more. He desires to be an Initiator; to be classed, not among those who, "taking in at one glance all the elements, all the forces, actually in operation, know how to bring them into play, and to put them in a favourable position for drawing from them the grandest results which they are capable of yielding"—but with them "to whom enthusiasm and the energy of conviction communicate the power of setting in motion that unused activity, that surplus of hidden strength,

which exists in the men of every age." In a word, he would create the future by the force of ideas.

We respect men who bring us principles more than men who confine themselves to the consideration of "questions." They take higher rank in the hierarchy of benefactors. But to ensure our esteem it is necessary their principles should be sound. We do not believe those entertained by Mr. Mazzini, of politics, literature, and art, to be sound. We agree with the current notion of Englishmen of their merits; we do so, however, not because, like them, we dislike broad principles, but because we conceive the principles to be false. The most important deduction Mr. Mazzini makes from his is the necessity for the unification of Italy, with Rome as its capital, and the establishment of a Republican form of government. This is the mastering idea of his life. Herein he has ever been consistent. The views indicated in his earliest publication, under the pretence of literary discussion, he has continued to enunciate ever since—through evil report and good; in the press; in conversation; in preparing insurrections; in the day of his success; in exile. The triumph of this idea would, he conceives, make his country once more great, glorious, and free. We do not believe this. We believe the freedom and happiness of a people are not the result of their political institutions, but that their political institutions are, in great degree, the result of their own temper and aspirations. The Government of no people, left to themselves, can remain, for any length of time, out of harmony with the sum of the wishes, and requirements, and deserts, of the governed. Mr. Mazzini cannot be unaware that Rome was once the capital of Italy as well as of the world, and that even then the Peninsula was not united. During the Middle Ages, again, at the end of the thirteenth century, the country was split up into independent governments; yet the several States possessed power and enterprise which all Europe could not match. Pisa, Genoa, Venice, Florence were rivals; but they were each great. During the twelfth and thirteenth centuries, as M. Mazzini must well know, commerce was almost entirely in the hands of the Italians. His countrymen were the bankers of Europe, and the great carrying-people between the East and West. The shores of the Mediterranean were lined with their vessels and war-galleys, and the influence of their counsels was felt throughout Christendom. Yet the country was then less united than it is now. The truth is, Italy was formerly great from causes, moral and physical, which no longer exist within her limits. The elements of success are now wanting in her, and all attempts to make her equal her former exalted state by any political changes that can be devised will inevitably result in failure.

Nor does he confine his principles to action; he applies them equally to literature and art. In his writings, now in course of publication, his method of application is clearly seen. Literature, with him, is the means to an end, and that end "an appeal to the youth of Italy to create a country for themselves by force of arms." He complains that previous to his time writers of the Romantic school devoted themselves to objective art, and not to what he avers to be his sole

merit, "declaring themselves for liberty against oppression." His notions of art, too, are similarly vicious. He is of opinion that the special aim of art is "to excite mankind to reduce thought to action." Just as English critics would make Art the handmaid of Religion and Morality, he would make her the handmaid of Revolution. Two errors, he tells us, threaten art—the theory that it is an imitation of nature, and the theory that has created the formula of "Art for art's sake." "The first would deprive it of all spontaneous individual life; the second break the link that binds it to the universe."

It is scarcely necessary for us to say we differ from Mr. Mazzini's notions of art and literature as widely as we differ from his political principles. He utterly mistakes the function of literature, if he would make it a vehicle for direct political action. We hold that to do this would be to degrade literature. During the War of Independence in Germany, people were constantly in the habit of blaming Goethe for not raising his voice against Napoleon, just as the Italian now blames the *literati* of his country for not interrogating "the thought of the epoch in the nation." In opposition to this view, we commend to the attention of Mr. Mazzini, and such as would make literature the vehicle for direct political action, the reply of Goethe, than whom no one in this century better understood the function of literature. The same eminent writer's observations on the function of art also may be studied by them with advantage at the same time. Goethe contended, as we do, that art would no longer be art if deprived of an aim and object of its own, and that to deprive it of these would be to deprive it of its legitimate influence and power.

T. P.

CURRENT LITERATURE.

THE STORY OF THE GREAT MARCH.

The Story of the Great March. From the Diary of a Staff-Officer. By Brevet-Major G. W. Nichols, Aide-de-Camp to General Sherman. (Sampson Low and Son.)

IN justice to Major Nichols, we must give his own brief description of this book: "My service as aide-de-camp on the Staff of Major-General Sherman began with the fall of Atlanta. The remarkable features and events of the Campaigns of Georgia and the Carolinas, visible to me during the whole of the Grand March, were noted daily in my journal. From that diary this 'Story of the March' is compiled."

The battle of Allatoona was fought on the 5th October, 1864. Hood's last hope of cutting off Sherman's communications was gone. He fled up that pass, routed and in disorder, to dream of the sack of Nashville and boundless retaliation, but in fact to be the dupe of Sherman, and the prey of his lieutenant. On the 12th, the army of Sherman stood detached and cut off from all communication in the rear. At Cartersville the last link with the North was severed with the telegraph wire. It bore the message to General Thomas, "All is well." On the night of the 15th, Atlanta was given to the flames, and the last brigade of Massachusetts soldiers stepped out, to the tune of "John Brown's soul goes marching on." No regular force now barred the way between Sherman and the sea, and it was towards the sea that Sherman steadily set his face.

Nine days later General Slocum entered Milledgeville, the capital of Georgia, without firing a gun; another ten days and the army reached Millen, and for the first time its ob-

ject became clear to the enemy. At Millen, the march eastward necessarily stopped. North lay Augusta, no prize as a military station, but full of stores, provisions, and cotton, and crowded with rebel soldiers and militia, who ought to have disputed the banks of the Ogeechee. But south is Savannah, and beyond Savannah is the sea. That sea should now be white with Yankee sails, and black with Yankee smoke; and it is the Yankee fleet which is the hope and the object of Sherman's army. Still it was expedient to keep as many of the enemy's troops as possible in doubt at Augusta. This duty was left to Kilpatrick's cavalry. For a few days more they deceived Bragg and Longstreet; then turned due south, and rejoined the main force within a few miles of Savannah. Till now there had been scarce any serious opposition. The enemy had never met the Yankee infantry; but as Savannah came in sight, a strong line of works appeared everywhere, and apparently a large force was entrenched behind them.

The hazardous moment of the enterprise had arrived. The supplies of the army were nearly exhausted, and the swamps round Savannah could not produce the chickens and turkeys, and the sweet food of Georgia. The Ogeechee had still to be crossed, and beyond the Ogeechee, within cannon-range, stood the frowning parapets of Fort M'Allister, its ponderous guns and rebel garrison guarding the only avenue open to approach. But no Confederate warriors lined the banks of the Ogeechee, and the only dispute it gave rise to was one between the rival corps who wished for the danger and the glory of the assault of the fort. Major Nichols saw that assault, and he must tell the tale:—

Dec. 13.—Fort M'Allister is ours. I saw the heroic assault from the point of observation selected by Sherman at the adjacent rice-mill. The sun was fast going down behind a grove of water oaks, and as his last rays gilded the earth all eyes turned to the rebel fort. Suddenly, white puffs of smoke shot out from the thick woods surrounding the line of works. Hazen was closing in, ready for the final rush of his column directly upon the fort. A warning answer came from the enemy, in the roar of heavy artillery; and so the battle opened. Sherman walked nervously to and fro, turning quickly now and then from viewing the scene of conflict to observe the sun sinking slowly behind the tree-tops. No longer willing to bear the suspense, he said, "Signal General Hazen that he must carry the fort by assault—to-night, if possible." The little flag waved and fluttered in the evening air, and the answer came, "I am ready, and will assault at once." The words had hardly passed, when from out the encircling woods there came a long line of blue coats and bright bayonets, and the dear old flag was there, waving proudly in the breeze. Then the fort seemed alive with flame; quick and thick jets of fire shot out from all its sides. . . . Sherman stood, watching with anxious air, awaiting the decisive moment. Then the enemy's fire redoubled in rapidity and violence. The line of blue entered the enshrouding folds of smoke. The flag was at last dimly seen, and then it went out of sight altogether. The firing ceased. The wind lifted the smoke. Crowds of men were visible on the parapets, fiercely fighting—but our flag was there. The sounds of battle ceased. Our gallant men fired their pieces in the air as a *feu de joie*. The fort was won.

In half-an-hour more General Sherman was paddling down in his little boat, regardless of torpedoes, to seek the signal-vessel of the navy. The fort was bravely won. Though no assault, as the enemy confessed, was expected that night, it could not have held out, and the loss in its capture was only ninety killed and wounded. The bloodless surrender of Savannah was the final episode of the first portion of "The Great March"—the March to the Sea.

The twenty-seven days' march of Sherman through Georgia is without a parallel in military annals. And there are many reasons why it cannot be judged by the ordinary rules of warfare. Its course was nominally through an enemy's country; but that enemy spoke the same language, and those who stood in the place of peasantry looked upon

the invaders as friends. No line of communication was kept up; but the country was rich in corn, flesh, and fowl, and at the end of the march was a navy, laden with provisions enough for the army of a nation. There was, however, one thing necessary. The enemy was neither powerful nor numerous; still he might concentrate his forces in many an awkward spot, and time and ammunition were invaluable. But he had, in his turn, many places to defend; and the size of the country, which was thought so adverse to the chances of an invader, became a material element in his chances of success. Here shone the genius of Sherman. The enemy acted as if without any commander-in-chief at all. They were everywhere and nowhere. But Sherman was everything. Threatening Macon, Augusta, Charleston, and Savannah at once, he steadily marched on to the latter. There was no necessity for the brilliant strategy which marked the campaign of the Carolinas. The folly of Davis had practically cashiered the first general of the South; and as, when we come to review the duel between Sherman and Johnston, their manoeuvres and fortunes will occupy our chief attention, we will now follow the lead of Major Nichols, and content ourselves with a few pictures from this luxurious episode of the war:—

A large plantation appears by the roadside. Its barns are full of corn and fodder, and parties are at once detailed to secure the prize. Then one man is left to guard it until the proper waggon comes along. He sits upon some cross-road, surrounded with his spoils—chickens, turkeys, geese, ducks, pigs, hogs, sheep, calves, nicely-dressed hams, buckets full of honey, and pots of fresh white lard.

An officer who is riding along gazes upon the appetizing show. He has recently joined, never has been on one of Sherman's raids, and does not know that a soldier will not sell his chickens for any price. "Ah, a nice pair of ducks you have there, soldier; what will you take for them?" Firmly, but respectfully, the forager makes answer, touching his cap the while, "They are not in the market. We never sell our stuff, Sir—couldn't think of it." The officer rides away through a battery of broad grins from the bystanders, and never again offers to buy the spoils of a forager.

We had been told that the country was very poor east of the Oconee, but our experience has been a delightful gastronomic contradiction of the statement. The cattle-trains are getting so large, that we find difficulty in driving them along. In addition to fowls, vegetables, and meats, many obtain a delicious syrup, made from sorghum, which is cultivated on all the plantations, and stored away in large troughs and hogs-heads. Over the sections of country lately traversed, I find very little cultivation of cotton. The commands of Davis have been obeyed; and our large droves of cattle are turned nightly into the immense fields of ungathered corn, to eat their fill, while the granaries are crowded to overflowing with both oats and corn.

Or take the method of march:—

Nov. 29.—All day long the army has been moving through magnificent pine-woods,—the savannahs of the South, as they are termed. I have never seen, and I cannot conceive, a more picturesque sight, than the army winding along through these grand old woods. The pines, destitute of branches, rise to a height of eighty or ninety feet, their tops being crowned with tufts of pure green. They are widely apart, so that frequently two trains of waggons, and troops in double column, are marching abreast.

Nov. 30.—With the exception of the 15th Corps, our army is across the Ogeechee without fighting a battle. This evening I walked down to the river, where a striking and novel spectacle was visible. The fires of pitch-pine were flaring up into the mist and darkness; figures of men and horses loomed out of the dense shadows in gigantic proportions; torch-lights were blinking and flashing away off in the forests; and the still air echoed and re-echoed with the cries of teamsters, and the wild shouts of the soldiers. A long line of the troops marched across the foot-bridge, each soldier bearing a torch, and, as the column marched, the swift light was reflected in quivering lines in the swift-running stream.

Major Nichols seems, according to his own story, to have quite forgotten his politeness in the hour of victory:—

A highly-cultivated lady of Savannah said to me—

"It is terrible, Sir! All my slaves have left me; my plantation is broken up. I don't know but the land will be given to my slaves. I have no money, or but little. I shall have to starve or work."

"Well, Madam," I replied, "I really wouldn't advise you to starve. Supposing you do work?"

"But I never did such a thing in all my life!"

Mrs. —, who had always passed her summers at the North, and had lived a life of perfect ease, found her income of 20,000 dollars a-year swept away at a single blow. With the most charming innocence, she protested to me: "I really fear, Sir, that I shall have to submit to the disgrace of giving lessons in music!"

I was rude enough to reply, "Madam, I hope so."

A Staff-Officer, from his position, must have seen a great deal of General Sherman; and whilst they are resting together at Savannah, we may employ the interval in extracting some of the most characteristic sketches of his Chief from the Major's notes:

General Sherman's memory is marvellous. A soldier who may have addressed him long years ago in the swamps of Florida; some heroic deed of an officer or soldier at Shiloh; a barn or hill-side in Georgia; a chance expression of your own, which you may have forgotten; the minutest particulars in the plan of a campaign; whatever he has seen, heard, or read, he remembers with astonishing accuracy.

His keen sense of commercial integrity finds an apt illustration in an incident of his career as a banker in California. At that time it was the habit of Eastern men to send funds to California for favourable investment, and Hardee and others of Sherman's old army friends sent remittances to him for that purpose. During the financial panic in 1857, the securities which had previously given the investors a high rate of interest suddenly became worthless; but Sherman refunded the money, which was accepted with the knowledge that the banker suffered the entire loss.

The following is eminently American:—

The character of Sherman's mind is growth. Perhaps the process is slow, but it is not the less sure. Few men have so harmoniously united common-sense and genius as Sherman. He can hardly be styled a representative man, but he is altogether original, and is, at the same time, a pure outgrowth of American civilization. He is a Democrat in the best sense of that word. There is nothing European about him. He is a striking type of our institutions, and he comprehends justly the National Idea.

CALENDARIUM GENEALOGICUM.

Calendarium Genealogicum—Henry III. and Edward I. Edited by Charles Roberts, Secretary of the Public Record Office. (Longman & Co.)

THIS book is a literary curiosity. It has been in hand thirty-two years, and is an achievement that the first Record Commission made a lame attempt to accomplish sixty years ago. It is, in fact, a corrected edition of the two first volumes of the "*Calendarium Inquisitionum Post Mortem*," published in 1806–8. In the good old days when officers in the public service were paid by fees, the records entitled *Inquisitiones post mortem* yielded a fine harvest. These were inquisitions held in the time of the Plantagenets, by command of the king, under writs issuing from the Court of Chancery, for the purpose mainly of ascertaining the rights of succession to landed estates on the death of the owner. The principal interest to searchers in these old records lay naturally in the names of the heirs, who, five or six centuries ago, had their rights defined and fixed by means of these documents. When, therefore, the Record Commission in 1806 published the first volume of a "*Calendar of the Inquisitions*," great was the disappointment of genealogists and historical inquirers to find that what was most wanted, the names of the heirs, had been left out. It would, we presume, have been reckoned a monstrous invasion of vested interests if researches that yielded abundant fees had been superseded by the publication of a really useful calendar. In 1808 a second large folio appeared,

bringing the list down to the end of Edward I.'s reign. As Mr. Roberts has not proceeded with his calendar to a later period than this, we have nothing further to say of the work of the old commission than that by 1828 a third and fourth volume, extending the catalogue to the reign of Richard III., had been published, and that the total cost to the country of this defective compilation was 9,800*l*. Besides the one grand defect, errors of the grossest kind were committed. Documents were misplaced under wrong dates, others were marked as missing which were only out of place. Names were misspelt, or were altogether falsified. Mr. Roberts gives a short list of some of these errors. "*Galfridus de Sandiacre*" was printed for "*Galfridus de Saucemare*;" "*Rogerus Le Poer*" for "*Rogerus le Ster*." The Prior of "*Theremhale*" was made Prior of "*Belchagre*;" "*Hugo Wygod*" was transformed into "*Hugo Bygod*," and so on, in ludicrous variety of blundering.

In 1833 Mr. Roberts undertook to make this new calendar. His work was interrupted by the expiration of the commission in 1837, and is now printed at the expense of the Treasury, on the recommendation of the Master of the Rolls. In detailing his plan, he says: "All the information contained in the *Inquisitiones post mortem* respecting the death of the individual and his heirs is extracted in the words of the Records, and as the *Inquisitiones* taken on the same occasion in various counties frequently differ in many points—such as the age of the heir, his birthday, his name, the degree of relationship in which he stood to the deceased, and indeed on some occasions state a different heir in all these cases—two, three, or more extracts are given, to show the various statements made by different juries. . . . Genealogical information has also been collected from other documents to complement these, the purport being given in a *Précis* (printed in italics), the composition of which in so great a number has been a very laborious task."

Very curious and interesting are the records known as "*Proofs of age*." As the king enjoyed the revenues arising from the possessions of minors who were tenants of the king, great care was taken to ascertain the true age of the heirs, so that the inheritance might not be transferred to them a day too soon. Therefore, on the termination of a minority, a writ was issued for taking a proof of age. Twelve men were summoned as a jury, each of whom stated on oath the particulars of his knowledge and the causes of his remembrance. Well worthy of remark are the examples given of the state of the law at that period regarding marriage and the succession of heirs. Here is an ancient sort of Yelverton case. One William de Cardunville had solemnly espoused a woman named Alice, who lived with him sixteen years, and bore him several children, of whom one boy, Richard, still survived. Before the father died another woman, Joan, by whom he had a son previously to his marriage with Alice, claimed him as her husband in the Ecclesiastical Court, by virtue of some promise he had given her, which being proved to the satisfaction of the court, it decreed in her favour, and pronounced a sentence of divorce from his wife Alice. On the *Inquisition* held after the death of the husband, the jury had doubts whether, as Joan had never been solemnly espoused at the church door, her son, then twenty-four years old, or the son of Alice, was the right heir. Evading the difficulty, they settled that in case neither of them was heir, the property would go to Richard de Cardunville, brother of the deceased.

Another Joan, daughter and co-heiress of Philip de Baunville, is claimed by William de Stanleze as his wife, on the strength of a promise and pledge of troth given in the presence of two witnesses. The contract was made, says one of the jurors, on Sunday after the Feast of St. Matthew, at Astebury Church (Salop), when they took the oppor-

tunity of a banquet at which Joan's father and his family were present, and she decided on this step because she expected her father intended to marry her to the son of her step-mother. Their stolen marriage was not, however, recognized by the king, who received her homage alone as Joan de Baunville, without any allusion to her husband.

Among the ancient customs illustrated by the *Inquisition* is one that might prove a trial to the magnanimity even of the eminent bride of Hawarden, recently celebrated by Lord Lyttleton in the words of Sir Richard Doyle. In the *Inquisition 4 Edw. I., No. 88*, the jury state four instances in which they recollect that on the decease of the lords of the honor of Hawardine the dames had not, and ought not to have had, any dower assigned them out of the honor or lands of the manor of Hawardine.

According to the usage and custom of the town of Bridport, the heir of John Gervase was declared of full, that is legal age, on the day of his birth (*Inq. 53 Hen. III., No. 16*).

The daughters of Owen ap Meurich are his next heirs, though illegitimate, and the record declares that in Buelt the illegitimate as well as the legitimate succeed to the inheritance of their ancestors, and have always been accustomed to do so.

Some of the services for tenure are equally curious and characteristic. John Paternoster held lands in Esthenreth (Berks) by the service of repeating daily the Lord's Prayer, with the Salutation of the Blessed Virgin, for the king and the souls of his progenitors, kings of England. And Salomon de Chanuz held a tenement in Ceperlond and Atterton (Kent) by the service of holding the king's head whenever he crossed the sea to foreign parts. Watching his Majesty in sea-sickness, however nauseous, would be a service more easily performed than the compulsory prayers daily repeated.

Mr. Roberts, in concluding his preface, draws attention to a document of interest that has been misplaced, and attached by parchment thong to one of the fly-leaves of Domesday Book. It is a valuation taken on Monday before the Feast of St. Peter ad vincula 48 Hen. III., 1264, of the lands which Walran de Welleslegh held at his death of the Bishop of Bath and Wells, in the county of Somerset. After describing the property, it is stated that Michael de Welleslegh is the son and next heir of the said Walran, and nineteen years of age, and that he is dwelling in Ireland, where his father died, as is reported. This document proves that one branch of the Irish family of Wellesley had begun to settle in England at this early period.

We think we have already shown that the two volumes before us, dry and uninviting as they may seem at first sight, are replete with interest and information, and that Mr. Roberts deserves the hearty commendations of all who are capable of appreciating the weight of the task he has so well accomplished.

ALGERIA.

A Winter in Algeria, 1863-4. With Illustrations. By Mrs. G. A. Rogers, Author of "*The Folded Lamb*," and "*The Shepherd King*." (Sampson Low, Son, and Marston.)

HEINE, in his *Reisebilder*, condoling with the reader who attempts to wade through his description of foreign lands, offers him a curious species of consolation. He advises him to reflect that if the task of reading be thus tedious, that of writing must have been tenfold worse. After suggesting that he can close the book at any moment, and counselling him to do so once and for ever at the page at which he has then arrived, he heaves a sigh of regret that the privilege of skipping at will a page or a chapter is, of necessity, confined to the reader, and can by no means become the property of the writer. This power of the reader to skip we would earnestly recommend to those who take up this most recent work on Algeria, and should he happen to

skip the entire volume his loss will not be irreparable. Civilization and common-place go hand in hand, and before their progress the confines of the romantic and the marvellous step by step recede; but it would seem as if in the past and present of Algiers the extreme bounds of the incongruous had been attained. The streets of dazzling white houses along that glorious amphitheatre whence Algiers smiled in siren-like beauty and terror upon the Mediterranean, are now laid out in well-constructed boulevards, glittering with plate-glass and noisy with the roll of omnibuses; and where Cervantes pined in his long and cruel captivity, strong-minded Englishwomen now waddle in perfect security, and scatter among the descendants of the Barbary pirates the pious publications of the Religious Tract Society.

The whole purpose of the visit of Mrs. Rogers to Algiers appears to have been the distribution of advice and literature, both gratuitous, and neither rank, age, nor profession seems to have afforded a protection against her meddlesomeness and love of disputation. She is literally, according to her own description of herself, the most objectionable woman whom in literature or real life we ever met, and she seems to have encountered in "G.," whoever he may be, a meet helpmate in her self-imposed task. Even the monks of La Trappe, a colony of whom has settled in Algeria, cannot, with all their precautions against women, escape her most indefatigable persecution. She quotes the sentence over the gates forbidding the entrance of women, and is at no trouble to conceal how her mouth watered at the sight of the prohibited region beyond the door. "We might at least have inspected their live stock," she plaintively laments; but as even that privilege was denied, she solaces herself with the appearance of a lay brother, with whom she enters into conversation. Not wishing to treat irreverently sacred subjects, we find it difficult to make an extract from the conversation she inflicts upon the man:—

"Do you believe in the Holy Virgin?"

"We honour her as a blessed and holy woman, honoured of God, but we do not worship her as divine."

"Yet she was the mother of God."

"Not the mother of God, but of the Lord Jesus in His human nature. He was perfect God, as well as perfect man."

"You cannot separate the two natures. It would be absurd to say of a mother 'she is the mother of her child's body, but not of his soul,' when the two form but one person."

"No such illustration can be analogous, because our Lord existed as God from before the foundation of the world; a child has no prior existence."

"I am not sure of that. Some of the Fathers have held that every child has been pre-existent," and away into a labyrinth of Fathers the good monk was wandering, when G. brought a box made of the shell of a tortoise, with which the neighbourhood abounds, to ask if I would like it.

"Why do you not rather buy one of those crucifixes; those of a white ivory figure on an ebony cross?"

"Because we are not to make to ourselves any graven image. They are very pretty, but lead to idolatry."

"Well, that is strange! A great many English who have been here have bought them, and yet they were Protestants; but they said if they placed a crucifix before them it helped them to say their prayers."

"Then, although they had the name, they were not really Protestants. True Christians have Christ in their hearts, the hope of glory, and should need no such external aids to devotion."

Similarly uncharitable judgments are rife in this book. They are, indeed, so numerous that the reader encounters them in almost every page. Visiting an Arab house, concerning the inmates of which, as far as we can ascertain, she knows nothing whatever, she yet decries them as "a strange, godless set;" and speaking of an orphan asylum recently established, she writes, "There should be no room for suspicion respecting the soundness of the teaching within its walls, and its evangelical professions should

ever be an exclusion of Latitudinarianism on the one hand, and of Popery and Unitarianism on the other. A Roman Catholic she always addresses to his face as a Romanist, and she speaks of "the pernicious effects of the present semi-popish, semi-infidel teaching" of the schools of France. Next to bigotry, credulity appears to be the strongest faculty in the nature of our authoress. She states, with perfect aplomb: "A French gentleman, who called to-day, proved himself to be a most sensible man, by telling me, with all apparent sincerity, that everyone acknowledged England to be the first country in the world, and even that all the French journals confessed it;" and she quotes the remark addressed to her by a French lady to whom she had spoken on religious subjects, "I have travelled on this line repeatedly, but never before met, and never expected to meet, any one who would speak to me as you have done"—words which, as they are precisely those we should ourselves use in case of meeting a lady of the same order as Mrs. Rogers, we persist in interpreting, in spite of the context, as intended to convey rebuke, and not admiration, at least in its modern sense.

The information contained in the volume is very slight, and the form adopted—that, namely, of a diary—renders the proportion of irrelevant matter introduced larger than it would otherwise have been. An entire day's entry, in one case, conveys only the information that G., riding on "a hired barb," the stirrup gave way, and he was thrown. A subsequent day we learn that "the effects of the fall have been felt more severely than we at first apprehended; but we must be thankful it was no worse. Had he fallen a couple of feet further on, his head would have come in contact with a rock." This would have involved a calamity, the extent of which we fully appreciate; and which, we trust, we should have been Christians enough, in spite of temptation, to deplore. Singularly few descriptions of scenery or individuals are presented in the work, and were it not for the illustrations, which are excellent, we should rise from its perusal with a sense of having learned nothing, or next to nothing, of a country concerning which we had read a volume of well-nigh four hundred pages. The most valuable portion of its contents consists of meteorological information, which has been supplied by M. Bulard, Director of the Imperial Observatory at Algiers, and a list of native plants peculiar to Algeria, furnished by M. Durando. These are published in the form of appendices. We do not know whether or not the theatre is considered a place of irreligious resort, but although in the table of contents we see "Theatre," on referring to the chapter in which it occurs, all the information given, which short as it is contrives to be tautological is, "There is a theatre of course; under French occupation *Cela va sans dire*."

One or two Arab legends which are introduced are worthy of preservation, and the game of Yadacé, which is very popular with the Algerians, is illustrated by an amusing story, for which the authoress is indebted to a Mr. Blackburn.

The game is of the utmost simplicity, and consists solely in abstaining from receiving anything whatsoever from the person with whom you play. In order to ratify the convention which is established between the parties at the commencement of the game, each player takes by the end a piece of straw, a slip of paper, or even, it may be, a blade of grass, which is broken or torn in two pieces between them, the sacramental formula, "Yadacé," being pronounced at the same time. After this, the law of the game is in full force—that is to say, the opposing parties are at full liberty to cheat, swindle, deceive, and take advantage of each other at the earliest opportunity. If a European takes part in the game, he is sure to be quickly beaten; but with two Moors, or Jews, or Moorish ladies, a struggle of mutual astuteness, caution, and circumspection begins, which is prolonged for days, weeks, months, and, in many cases, years.

The following story will suffice to initiate any one into the mysteries and peculiarities of the game; and also show the danger to a Moor of playing at "Yadacé" with his wife:—

Hassan-el-Djeninah was vizier, and chief favourite to the Pasha of the Oudjah of Constantine. He was the fattest man in the pashalic; and, more than that, was reckoned the most jealous husband in all Barbary; and it is something to be considered jealous in a land where all husbands are notoriously so.

Gay young Mussulmans trembled as they saw Hassan-el-Djeninah waddle across the great square of Constantine or issue from the barber's shops. He walked slowly, for his breath was short; but his yataghan was long, and he could use it. Hassan had four wives—a very moderate and respectable number for a Moor. The name of the youngest was Leila Khanoum. Now, if Hassan-el-Djeninah was jealous of his wives, they, you may be sure, were jealous of each other; save poor little Leila, who was only sixteen, and not at all of a jealous disposition; but between the envy of her sister-wives, who hated her, and the unceasing watchfulness of her husband, who loved her with most inconvenient fondness, she led a terrible life of it. Leila Khanoum was Hassan's favourite wife. He would suffer her, but no one else, to fill his pipe, to adjust the jewelled mouthpiece to his lips, and to tickle the soles of his august feet, when he wished to be lulled to sleep. He would loll for hours on the cushions of his divan, listening while she sang monotonous love-songs—rocking herself to and fro the while, and accompanying herself upon a guitar, in the manner of Moorish ladies. He gave her rich suites of brocade and cloth of gold; he gave her a white donkey from Spain to ride on; he gave her jewels, scented tobacco to smoke, henna for her eyelids and finger-nails—in short, he paid her every little delicate attention that he could think of; and finally, he condescended to play with her for a princely stake—nothing less than the repudiation of the other three wives and the settlement of all his treasures upon her—at Yadacé.

At the same time, as I said before, he was terribly jealous of her—watched her day and night. He kept spies about her, bribed her attendants, came home at daybreak after a night of watching silent and unobserved. He studied the language of flowers (which in the East is rather more nervous and forcible than with us); finally, he took a lodging on the opposite side of the street, that he might sit and watch who went in or out of his house, when he was supposed to be far away.

One day, while employed in this dignified pursuit, he saw his wife's female negro slave emerge from his house, look round cautiously, and beckon with her hand. Then from a dark passage a figure habited as a Frank followed the slave into the house, and shut the door. This was quite enough. Up jumped Hassan, rushed across the street, and into his wife's apartment, where the beautiful Leila was in the act of bending over a large chest that stood upon the ground. Hassan-el-Djeninah saw the state of affairs in an instant. The Giaour must be in the chest! He knocked over the wretched black slave like a ninepin, rushed to the chest, and tried to raise the lid.

"The key, woman! the key!" he cried.

"My lord, I have it not. It is lost; it is gone to be mended."

Hassan was not a man to be trifled with; the trembling Leila knew it, and soon handed him the key. He rushed to the chest, and tore open the lid. There was certainly some one inside, habited as a Giaour; but beneath the Frank habit were discovered the face and form of Sulee, Leila Khanoum's favourite Georgian slave!

"What—what means this?" asked Hassan, looking very foolish.

"Yadacé! O my lord, for you took the key."

"Yadacé!" repeated the Georgian slave.

"Yadacé!" screamed the negress, with a horrible grin.

"Allah akbar!" exclaimed the vanquished Hassan; "Allah akbar! I've lost my wives!"

An account of a Moorish wedding is very interesting. It is given from the description of an English lady, not the authoress, who, as a peculiar privilege, was allowed to be present. The amount of jewellery worn by the guests was almost fabulous. Every arm was laden with bracelets, the ankles and legs encased in golden bands set with precious stones, and the fingers and toes were buried in rings. The women wore strings

of pearls, gradually increasing in size, reaching down to the waist, and giving the appearance of a breastplate. The bride, eleven years of age, appeared in her white burnous and muffled hood a mere bundle of clothes. She was laid on a state bed, where she soon fell fast asleep. Afterwards, she was awoke, her hair was dyed black, and subsequently her face was enamelled. The eyebrows were next coloured, and were made to descend half-way down the nose. The face is adorned with "daubs of red paint;" the hair was braided in countless plaits; and her eyelashes were gummed down, that she might not be able to behold in public the husband she was about to accept. The description of a fight between M. Bombonnel, the great panther-slayer, and a large panther is terribly exciting, but we fancy overdrawn. Anything more horrible has seldom been read. Here is the concluding episode of the fight:—

With the bravery of desperation, Bombonnel, who had relinquished the futile search for his knife, now clung to the hope of strangling the beast as his only chance of life. But before he could raise both hands, the panther had once again seized his face sideways, and burying its formidable teeth in his flesh, cracked his jaws! The indescribable agony produced by this last attack, the noise which sounded in his brain, the sensation of having his head ground in a mill or pounded in a mortar—the only similes to which he could liken it—made him give up all for lost.

Horrors still greater had yet to be endured. The panther next took the hunter's face in his mouth, from whence issued a most horrible, infected odour—stifling, poisoning him! Yet, strange to say, his entrance into this awful cavern, nerved Bombonnel afresh with almost superhuman strength. Seizing with both hands the panther's neck, which he described as of the thickness of a hat and hard as a trunk of a tree, Bombonnel squeezed it with the force which despair alone could give, and threw away from him the terrible head. Rushing back in fury, the beast threw itself on his left arm, and inflicted four enormous wounds above his elbow. But for his thick and heavy clothing, his arm would have been shattered as so much glass.

During the whole of this awful struggle, Bombonnel had lain flat on his back, his head on an inclined slope, at the very edge of the ravine; his legs raised up to aid in his defence; over him the panther, whose frightful roarings made the Arabs tremble like aspen-leaves in their distant retreat, some four or five hundred paces away.

Again the panther tried to grasp his head; again Bombonnel managed to repulse him; but the contest thus waged was too unequal to be indefinitely prolonged. While gasping for breath, the hapless man once more felt his head seized, and engulfed in the large mouth. Exerting then his whole remaining force, heedless of death if dashed to pieces in the abyss beneath, uniting rage and strength in one supreme effort, he succeeded in disengaging himself. As with the convulsive energy of a dying man, he grasped the beast with both hands, lifted it up with tremendous force, whirling it over his head as though it had been a football—so vigorously, so unexpectedly—that the panther, with its fore-paws mangled and useless, unable to resist, slid over him down the rapid descent and rolled into the ravine beneath, filling all the neighbouring air with the thunder of its roarings. Our hero felt the teeth of the beast graze his scalp as he tore away its head; he saw the thickly-wadded hood of his hunter's coat still in its hideous jaws; he knew—for consciousness lasted long enough to enable him to realize the fact—that deliverance had come at last, and then, and not before, Bombonnel sank back exhausted!

A rather amusing story, which, however, has a parallel in most countries, is told concerning an Arab who had lost first his wife and subsequently his cow by the ravages of panthers. Though strict etiquette forbids an allusion under ordinary circumstances to a wife, M. Bombonnel, in this instance, ventured to condole with the husband, who, interrupting his expression of sympathy, exclaimed, "Mais, mon ami, tu ne dis rien sur la perte de ma vache; et moi je regrette beaucoup plus la perte de ma vache, que celle de ma femme! C'est tout

simple, Monsieur, les femmes dans les montagnes ne se vendent pas cher, et la mienne était déjà vieille."

Intending visitors to Algeria will find in this volume some information as to the best modes of obtaining apartments, the probable cost of living, and other similar subjects. The general reader will find little of interest beyond what we have transferred into our pages.

POETRY.

Pietas Puerilis; or, Childhood's Path to Heaven, and other Poems. (Dedicated by special and gracious permission to H.R.H. the Duchess of Cambridge.) By the Rev. Albert Eubule Evans. (Joseph Masters.)

Footprints of the Horse. By "Eos," Author of "Gift Poems." (Hatchard & Co.)

Compensation, and other Poems. By Emily Jane May. (Eliot Stock.)

Poems. By H. Major. (William Freeman.)

Intervals of Rest and Refreshment During the Heat and Burden of the Day. By a Labourer in the Vineyard. With a Preface, by the Right Rev. the Lord Bishop of Ripon. (Hatchard & Co.)

Ephemeris. By Helen and Gabrielle Carr. With illustrations by Helen Carr. (E. Moxon & Co.)

OTHERS beside Monsieur Jourdain talk prose all their lives without knowing it. Some even talk prose and think it poetry; and the victims of this hallucination, unlike the Bourgeois Gentilhomme, will be but little grateful to those who point out to them their error. The facts cannot, it appears, be too often stated, that prose broken up into lines of certain regular or irregular lengths, and fitted with terminations more or less similar in sound, is not poetry; and that he who devotes himself to such labour has no more title to the name of poet, than the stonemason or the metal-caster has to that of architect or sculptor.

The matter in nine or ten volumes of ephemeral verse, selected at random, will be found to be all but identical. Common-place sentiment is succeeded in each by descriptions equally common-place. The domestic affections are liberally appealed to, and a vein of calm religious reflection is opened out. The prevalence of religious subjects in this branch of literature is a remarkable feature. A Goethe or a Milton may invest with qualities human, and in part estimable, the author of evil; and a Shelley or a Swinburne arraign the heavens of injustice; but with the poetaster orthodoxy exact and unswerving is as indispensable a qualification as dulness. In this there is a certain measure of worldly wisdom, inasmuch as a portion of the public may always be beguiled into buying a book in which the views with which it is familiar are presented with the novel accessories of metre and rhyme. The presence of religious matter constitutes, however, a source of constant perplexity to the critic, who, treading reverently among sacred subjects, fears that the ridicule he intends for the composition may be erroneously assigned to its theme.

"*Pietas Puerilis*," by the Rev. Albert Eubule Evans, is a very handsomely printed volume of verse, dedicated by "special and gracious permission" to Royalty. Its contents, with some few exceptions, among which may be counted some lines addressed to H.R.H. Prince Albert Victor of Wales, are on religious subjects, and are High Church in tone. The longest piece in the volume is entitled the Guardian Angel, and is in verse Byronic in structure. It is as ambitious in aim as incompetent in effort. Its opening stanzas,

'Twas in the eighteen-hundredth year
Since the Holy Saviour died,
are but a feeble imitation of two well-known verses of a poem by no means religious—

In the year since Jesus died for men
Eighteen hundred years and ten;

and are as prosaic as can well be conceived. The lines quoted below represent the baptism of the child over whose destinies the guardian

angel keeps watch, and afford an instance not easily paralleled of exaggerated and incongruous images.

They bore him to the church, the while
The eager sun-rays throng'd each aisle,
Like struggling souls compell'd to pass
Through glowing Purgatories of glass,
And borrowing in their passage through
A chasten'd luxury of hue,
Until, as though in Abr'ham's breast,
Within the tranquil fane they rest.

Suncrown'd and calm the infant lay,
Unconscious of the awful scene,
The while the mystic drops were shed
Upon that sky-like brow serene;
The priest the sacred symbol trac'd,
And watching angels thrill'd with joy,
As, trembling at the sight, they gaz'd
Upon the now regenerate boy.

Criticism upon productions of this nature is entirely superfluous. Profane subjects receive similar treatment at the hands of the Rev. Albert Eubule Evans; in the lines entitled "The Sunset at Sea," the following is the most noteworthy stanza:—

Down, down sinks the sun, and, Cæsar-like,
gathers
Around him his robes ere he rests with his
fathers;
Yet, like a friend's blessing, surviving the
grave,
His smile leaves a glow on the face of the wave.

"Footprints of the Horse," by "Eos," differs both in subject and style from the other volumes with which it is associated. We have to go back to an age which, compared with the present, is primitive, ere we can meet with verse such as that which "Eos" presents us. Tusser, in his "Five Hundred Points of Good Husbandrie," tells, in homely verse, what to plant in gardens in certain seasons, and describes with uncouth fidelity domestic occupations proper to the months of which he writes. In a similar manner "Eos" tells us how to handle a horse:—

His lessons he needs to be patiently taught,
Not flogged to, but kindly and carefully brought
To a sense of your wishes; he will soon understand

What it is you would teach, and obey your command.

To make an apt scholar you don't flog a boy,
Or you'd sadden the spirit and temper destroy.

Softly speak—meet his gaze—with a slow pace appear;

Whatever you do, excite no cause for fear.

If he moves, you stand still; by judgment and care

He will like you, and soon cease to tremble or fear.

Step by step he'll grow fond—his faith you'll soon gain;

He will carry—obey you—and move to the rein.

There is a matter-of-fact air about "Eos" which is indescribable. Even in his most ambitious attempts, he writes concerning any event very much in the same manner in which he would chat about it over the breakfast-table. Thus, describing a rebel Sepoy blown from a gun, we have the following whimsical stanza, in which, as in the following extract, the italics are our own:—

His body is not, *as you'd think*, dashed away,
And hurled in the air all in atoms and spray.
'Tis only its centre the force thus destroys;
Whilst head, arms, and legs, like automaton toys,
Instantaneously drop at the mouth of the gun,
And life takes its flight ere the thunder has done.

In a subsequent piece, we have a version of "The Charge of the Six Hundred," which should assuredly make Tennyson look to his laurels. The following stanza is inimitable in its blending of the homely and the grandiloquent:—

From his General despatched to the war-doomed
brigade.

"Where to?" the Lord Lucan inquiry made.

"Sir, there are the enemy, and there are the
guns—

It's your duty to take them!" 'tis so report runs.

THE READER.

23 SEPTEMBER, 1865.

Like stallions restrained, every soldier's eyes
Flash,
Though the instant assures them advance is
most rash.

A few lines further on, we read of the
ill-fated Light Brigade that, as they rushed
to the combat—

On the men a bright flush, like a bloom born
to fade,
As the beauty on roses, tinged the faithful
Brigade.

It is impossible to deal harshly with such
harmless absurdity as the foregoing, though
"Eos," having published a previous volume of
verse, must be regarded as a hardened
offender. His latest work is dedicated (by
permission) to the Earl of Cardigan.

Patrons seem to be once more needed by
the writers of verse, and the third volume
on our list is accordingly dedicated (by per-
mission) to the Duchess of Northumberland.
"Compensation, and other Poems," is more
sensible, though not more poetical, than the
volumes which have preceded it. We have
in it an ode to Peace, and a second to War,
in which the author has imitated the con-
struction of Milton's *L'Allegro* and *Il Pen-
seroso*; and, while adopting a similar metre
to that employed in those celebrated poems,
has, unconsciously we suppose, taken some
of their imagery also. "What is Reli-
gion?" is one of the feeblest, and at the
same time coarsest, stories ever printed. It
narrates a disgusting practical joke played
on a dandified clergyman while in his pulpit,
and its last two lines are as follows:—

Then what is Religion? In forgetfulness utter
That his words could be heard, he exclaimed,
"It is Butter!"

The reader may form from these lines a con-
ception of the entire poem, and may judge
for himself what rubbish is deemed worthy
of being printed as poetry.

Mr. H. Major is almost as bewildered
amid his metaphors as the Rev. Albert Eubule
Evans, but has a far greater mastery over
verse than his clerical compeer. The first
stanza of one of his songs runs thus:—

I love to sip the dewy lip
Of the flowery gem of worth,
When the dreamy eyes of the starry skies
Bewitch the sleeping earth.

We have endeavoured once or twice to
understand the "lip of the flowery gem of
worth"—not a flowery gem, let it be ob-
served—but have finally abandoned the
attempt. The following verse is hardly less
obscure:—

I love the glance of the moonbeam's dance
Tripping across the sea,
When its mazy sheen like a serpent is seen,
Playfully sportive and free.

If Mr. Major's love is restricted to objects so
seldom met with as those he describes, and
his fondness for which he avows, he will be
likely to carry with him to the grave a large
measure of unbestowed affection. In original
verse Mr. Major is only absurd, but in
vulgarizing some of the best of Beranger's
lyrics by attempted translations he becomes
offensive.

The next work on our list comes ushered
by a preface from the Right Rev. the Lord
Bishop of Ripon, stating that the volume
is not printed in consequence of its con-
tents being "imagined to possess any merit
as compositions in poetry." Such being the
case, we content ourselves with mentioning
that the volume consists of hymns, in which
the absence of poetry is atoned for by the
presence of an eminently devotional spirit.
None of its contents are suitable for
quotation.

The prosaic nature of the contents of
"Ephemera" is almost atoned for by the
pleasing cuts with which one of its authors
has adorned the volume of her own and her
sister's joint contributions. These pictures re-
present, for the most part, the charmingest and
chubbiest of Cupids in the most impossible
of attitudes. The verse is of most common-
place nature; a portion of it consists of
charades feebly imitating those of Præd

The following short poem may be accepted
as fairly representative of the contents of
the volume:—

THE WIFE.

Each morn I look on wintry skies,
Where neighbour Jones his labour plies,
Each eve I see him safe return
To where his cottage faggots burn;
But lonely still my home must be,
Till my sweetheart comes back to me.

I rock the child, I plait my braid,
And try to think I'm not afraid;
But fears will come—forebodings sad,
Thus parted from my soldier lad;
His regiment's to New Zealand gone,
And I must earn my bread alone.

A load seems on my heart to-night,
In vain I pile the faggots bright:
The babe's asleep; I'll kneel and pray
For him whom duty call'd away,
To fight among the savage men.
O! when will he return again?

I hear a voice! I hear a sound
Of footsteps on the frosty ground,—
The dog is sniffing at the door,
A shadow falls across the floor;
The latch is raised! he's home for life;
Now happy husband! child! and wife!

The practice of writing English verses is
little encouraged in our public schools; but
in some of the large private schools it is
a part of the system. We speak with abso-
lute knowledge when we say that in the
instances in which it is encountered one
boy in every ten writes, at the age of
fifteen, verse fully equal to the best to be
found in the volumes we have noticed; and
we believe, moreover, that the man of average
education who cannot write verse as good is
an exception. If we thought the evil of
works like the above ended with the weariness
inflicted upon the reader, we should, having
regard to the excessive narrowness of the
circle subjected to wrong, be indulgent. But
indulgence in such cases is cruelty. Scarce
one of the authors of the countless volumes
of verse that inundate our tables but is
firmly convinced of the fact that he is a poet
and a genius. Armed with the first indulgent
word that the critic may let fall, he will
impress on those who have hitherto restrained
him that his merits have now received
recognition, and will throw himself upon the
profession of literature. The end in such
cases is neither doubtful nor distant. To the
most practised, literature is no summer sea,
in which to float in security; while to the un-
skilled and incompetent, it is a dangerous and
treacherous deep, abounding in rocks and
quicksands, "in perils of shallow and firth,"
and without a single harbour of refuge.

CHRONICLES AND MEMORIALS OF GREAT BRITAIN AND IRELAND DURING THE MIDDLE AGES.

*Polychronicon Ranulphi Higden, Monachi Ces-
trensii; together with the English Translations
of John Trevisa, and of an Unknown Writer of
the Fifteenth Century.* Edited by Churchill
Babington, B.D. (Under the Direction of the
Master of the Rolls.) Vol. I. (Longman &
Co.)

NO country in the world possesses so com-
plete a series of chronicles of its early
history as our own—so great a mass of regu-
lar chronology and true incident—such faith-
ful, clear, and ample materials for the com-
pilation of an authentic narrative of events,
from the invasion of the Anglo-Saxons to
the invention of printing, and the union of
the two Houses of York and Lancaster; yet
no country has done less, in a national point
of view, to preserve and arrange such mate-
rials than we have done.

In France, as early as 1738, under the
editorship of Dean M. Bouquet, the Bene-
dictines of St. Maur, those greatest of
benefactors to historical literature, com-
menced publishing in folio the "*Recueil des
Historiens des Gaules et de la France*,"
which, during all the revolutions and changes
that have taken place in that country, con-
tinued, after the death of Dom Bouquet,
under Dean Brial, his successor, and others,

to have volume added to volume, till, in
1840, a century after its commencement,
these numbered twenty, and present, in a
collected form, such a body of national his-
tory, in the narratives of eye-witnesses of the
events recorded, as was never before brought
together.

The labours of MM. Bouquet and Brial,
from the date of the Norman Conquest,
serve to elucidate the history of England no
less than that of France. The copy of the
work which was used by the late Sir Francis
Palgrave for his "*History of England and
Normandy*" was filled with MS. notes in
pencil, the rough materials for the work left
at his death in an unfinished state. Alas!
these memoranda no longer exist. The pur-
chaser of the book at the sale of the Pal-
grave collection sought to enhance the money-
value of the copy by the removal of all those
notes with indiarubber, and the labour of
half a life is lost to posterity!

Germany presents us with another instance
of perseverance like that of the Benedictines
of St. Maur. In the year 1826, under the
patronage of George IV., as King of Hanover,
appeared the first volume in folio of "*Monu-
menta Germaniæ Historica*," from A.D. 500
to 1500, edited by G. H. Pertz, the thir-
teenth volume of which was published in
1856. This is one of the grandest books of
its class ever put forth, and reflects much
honour upon the Hanoverian Government,
at whose cost the work is being printed.

It is true that, previous to the issue of
the first volume of the "*Recueil des His-
toriens des Gaules*," under the patronage of
the Duke de Modena, Muratori had already
commenced his great body of Italian history,
the "*Rerum Italicarum Scriptores*," in
1723, which, with the supplements of Tartini
and Mitarelli (the latter published in
1771), forms thirty-two folio volumes. Yet,
though first in the field, the plan of these
two noble undertakings is so essentially
different, that that simple fact in no way
detracts from the praise of originality of de-
sign due to Dom Bouquet and his Benedic-
tines.

These are the three great national bodies
of European history; but the materials for
British history have yet to be sought by the
student and historian in the scattered collec-
tions published by Gale and Fell in 1687 to
1691; in those of Saville, published in 1596
and reprinted in 1601; of Twyden, of 1673;
in Commelinus's "*Rerum Britannicarum
Scriptores*," published at Heidelberg in 1587;
and in the collections of Camden, printed at
Frankfort in 1603, and of Du Chesne, at
Paris in 1719, whenever the work was not
thought of sufficient importance to entitle it
to a separate publication, such as was ac-
cording to the Saxon Chronicle, to the his-
tories of Matthew Paris and Matthew of
Westminster, to Eadmer and to Walsingham,
and to the writers given to the world by
Hearne, the most indefatigable of editors.

About forty years ago, our Government
determined that a complete body of British
history should be published under its
auspices; and the late Mr. Henry Petrie
was entrusted with the production of the
work. The first and only volume appeared
in 1848, after long years of expectation,
under the title of "*Monumenta Historica
Britannica; or, Materials for the History of
Britain, from the Earliest Period to the
Norman Conquest*." This volume, far from
satisfactory, had been prepared by Mr.
Petrie when Keeper of the Records, assisted
by the Rev. John Sharpe, the translator of
William of Malmesbury. It was issued
under his editorship, with introduction,
notes, and indexes, by Mr. Thomas Duffus
Hardy. The cost, however, had been so
frightful, that the Chancellor of the Ex-
chequer became alarmed, and, ten years prior
to the publication of the first volume, the
further progress of the work had been
abandoned.

The materials which had been brought
together were, however, far too valuable to
be thrown aside, and the use of them was
most liberally placed at the disposal of the

"English Historical Society," which society, indeed, arose, as it were, phoenix-like, out of the ruins of this great national undertaking. Its first volume, the "Historia Ecclesiastica" of Venerable Bede, appeared in 1838, edited by Mr. Jos. Stevenson. The title-page promises a new and revised text, collated with MSS. Mr. Stevenson spared himself this labour, and simply reprinted the text of Smith's Cambridge edition of 1722, notoriously one of the most corrupt, omitting the various readings, which constitute the real value of Smith's edition, that editor having advisedly, as stated in his preface, followed the text of one codex only, and carefully added his collation of other and more important MSS. by way of various readings. The text of the "Historia Ecclesiastica" has since had ample justice done to it by the Rev. Dr. Giles, in his edition of "Bede Opera Omnia," published in 1843. The English Historical Society continued its labours till 1856; and during the eighteen years of its existence produced twenty-nine volumes—some reprints, on the whole carefully edited; some Monkish Chronicles, printed for the first time; and the most valuable monument of Anglo-Saxon civilization, the late Mr. Kemble's "Codex Diplomaticus Ævi Saxonici," in six octavo volumes.

The rich materials for our history which still remain unpublished, or which are only attainable at great cost, and often even then only in the shape of faulty and imperfect texts, will, nevertheless, not be lost to us; for in January, 1857, the Master of the Rolls submitted to the Treasury "a proposal for the publication of materials for the history of this country from the invasion of Julius Cæsar to the reign of Henry VIII.; the materials to be worked up by competent editors, without reference to periodical or chronological arrangement—the rock upon which the original 'Monumenta Historica Britannica' split—without mutilation or abridgment; and preference to be given, in the first instance, to such materials as are most scarce and valuable."

We have noticed, from time to time, with great satisfaction several of the works of this important series of historical monuments, of which that placed at the head of this article is the forty-first. In size and typographical execution, the volumes correspond with the members' copies issued by the English Historical Society up to 1856. The "Polychronicon of Higden," now under notice, attained a great and well-merited popularity in the fourteenth and fifteenth centuries. In the Library of Winchester College are two MS. codices of the work, one of which, the more recent of the two, presented by William of Wykeham to his college, upon its foundation in 1387, has been partially collated for Mr. Babington by the Rev. Dr. Moberly. To it is prefixed a breviary of the chronicles of the kings of England, ending with the coronation of King Richard II. In the chronicle itself we read, at the end of year 1342, *Huc usque scripsit Ranulfus*. Then follows a continuation by another hand, giving some account of William of Wykeham, and also ending with the coronation of Richard II., the history being brought down, in the words of the scribe, *ad hodiernum diem*. Prefixed is a *mappa mundi*, which reverses Parallax's notion of the Poles, just promulgated in "The World not a Globe," noticed in our last number but one; for although the earth, according to the notion of the fourteenth century, is represented flat as a pancake, as Parallax, too, would have it, Jerusalem is placed in the centre, where our Parallax of to-day fixes the North Pole; Paradise at the extreme east, with the pillars of Hercules at the extreme west, and Britain in the north, opposite to Francia and Flandria, floating in a green margin representing the sea which surrounds the earth. We mention this MS. more particularly, because it proves beyond all doubt that Higden's "Polychronicon" was looked upon as a book of great authority by his contemporaries, or the illustrious founder of Winchester College and of New College,

Oxford, one of the wisest men of his time, would not have presented it in the expensive form—the value of a considerable estate in those days—if he had not prized it as one of the best books of universal history in existence.

That its reputation was early firmly rooted is proved also by two versions into English; the first by John Trevisa, Vicar of Berkley (1360), upon which the text of Caxton's edition of 1482 is founded, altered and amended, and having a continuation to the year 1460. This amended text, of which Mr. Babington gives a partial collation, was again re-printed by Wynken de Worde, the son-in-law of Caxton, in 1495, with additions and a Hymn to History; and afterwards, in 1527, by Peter Treveris, in as pleasant an old folio as a lover of black letter need covet. The second version was made in the fifteenth century, and is now first printed from the Harleian MS. 2,261. We recommend Mr. Babington's admirable introduction of seventy-one pages to the perusal of all who love bibliography and literary history. Mr. Babington is eminently qualified to investigate the merits and identity of Ranulphus Cestrensis and Roger Cestrensis, and to decide upon the evidence adduced by Wanley, Nicholson, and others, as to the charge of plagiarism brought against the former. Our own opinions have always been so strongly in unison with those advanced by Mr. Babington, that we cannot do better than place them before the reader in the words of that gentleman:—

Our author mentions at great length, in his second chapter, the authorities from which his history is derived. But before discussing them, it may be as well to consider a charge which has been brought against him by Wanley, Nicholson, and others. The first-named author, describing the Harleian MS., n. 655, writes thus in his catalogue:—

"Polycratia temporum, seu Polychronica Rogeri, monachi Cestrensis, quam foedissime defloravit plagiariorum insignissimus, Ranulfus Higden, commonachus suus." And again, describing n. 1,707 of the same collection, he tells us that Ranulph Higden was not the original author of the "Polychronicon" but an arrant plagiarist (plagiarium maxime insigne).

Bishop Nicholson repeats the charge, adding reasons which will be best understood and appreciated by citing portions of his accounts of Roger Cestrensis and of Ranulphus Higden, given in his "English Historical Library":—

"Roger Cestrensis, who was a Benedictine monk of St. Werburg, in Chester . . . wrote a large account of the affairs of this nation. This work he entitled 'Polycratia Temporum,' and began it with the coming in of the Romans; he continued it at first no lower than 1314, but added afterwards a supplement of fifteen years more. In the Harleian Library there are several MS. copies of this work, one whereof is frequently marked by Bale's own hand. By comparing these with those of R. Higden in the same noble repository, it is manifest that Ralph stole his pretended work from Roger, disguising it only with his own superscription. For (1) one of the copies of the 'Polycratia' is plainly the numerical book described by Pitts, under the name of Higden. (2) Another of them has *Ran. Cestr.* in a modern hand on its title, instead (as Mr. Wanley probably conjectures) of *Rog. Cestr.* raised out. (3) The forgery is most evident, from comparing a passage relating to the two Caerleons, to one whereof (Chester) the true historian takes notice of his being particularly related; which Ralph literally transcribes, adding, *Sicut per capitales hujus primi libri apices clarius patet*. Which is ascertaining the whole chronicle to himself, according to the villainous contrivance which we shall mention anon."

And again under Higden:—

"If you spell the first letters of the several chapters that begin it, you read: *Presentem chronicam compilavit Frater Ranulphus monachus Cestrensis*. 'Tis observable that the plagiarist picks out such capitals, and enlarges them, as are for his wicked purpose, and omits the rest; which is another notorious proof of his knavish forgery." Now, if we compare the accounts of Roger of Chester and of Ranulphus Higden, as given by Bale, from whom others do little less but copy, we are immediately struck with their remarkable similarity. Both Benedictine monks of St. Werburg of Chester, both concluding their

Universal Chronicle in the time of Edward III., both urged to write it by their fellow-monks, both adding to their original chronicle, both buried at Chester. Indeed, there is nothing in Roger's history which differs from Higden's, except so far as concerns (1), their names; (2), the titles of their works; (3), their dates.

(1.) With regard to the names, it is very probably by a mere error that Roger is written instead of Ranulphus; in many MSS. of the "Polychronicon" the name of the author is not given at all; and the book is often cited by others simply as the "Polychronicon," or as "Cestrensis" only; the latter designation seeming to be inconsistent with the notion that two monks of Chester wrote chronicles differing slightly from each other. There was a Roger Frend, afterwards Abbot of Chester, in Higden's time, and if he was one of those who urged Higden to compose the chronicle, and assisted him in the compilation, it is not impossible that his name might be attached to the work by some scribes who were only partially acquainted with the facts of the case. Moreover, as appears from Wanley's probable conjecture, the name of Ranulphus has, in one instance at least, been substituted for the name of Roger, as though the error had been detected and corrected.

(2.) No argument can be founded on the difference of the titles of their works. The "Polycratia" of John of Salisbury is designated in one of our MSS., and cited in one of the versions, as the "Polychronicon;" and in another MS. used in this edition, we actually have, "Idcirco eam historiam 'Polycratiam,' a pluralitate temporum quam continet censui nuncupandam." Indeed, "Polycratia Temporum" could not be used as a title of a universal history by any one who knew the meaning of the word, but in the general ignorance of Greek, the scribes, to whom the "Polycratia" of John of Salisbury was a familiar name, frequently confounded the two words. The work of Higden, moreover, is sometimes called Polycratia; thus our MS. C. has in the colophon: "Explicunt chronice venerabilis Ranulphi, monachi Cestrensis, in septem libellos distincte dictaque 'Historia Polycratia.'" In the sixteenth century, Higden's work was known under both titles. It is not altogether impossible that Higden himself may have made the blunder, and corrected it in his later editions; for it is in the earlier MSS., so far as we know, that this error is mostly to be found.

(3.) Very little stress can be laid on the slight difference of their dates. "Ranulphum ipsum plus quam xxii. annis præcessit," says Bale; but, by his account, Roger afterwards continued the chronicle from 1314 to 1339. Now, as many of Higden's earlier copies cease at 1327, and at various years afterwards, it can scarcely be said that there is any difference of time between his and Roger's chronicles.

The contents of the two chronicles may be said to be identical. Higden's work itself appears in a longer and in a shorter form; and Roger's "Polycratia" is only a slightly more abbreviated state of the shorter form.

Upon the whole, there seems to be no ground for the charge of plagiarism brought against Higden; and from henceforth dismissing Roger of Chester and his Polycratia as being things of buckrum, we proceed to consider the sources whence the Polychronicon was derived.

We cannot part from Mr. Babington without cordially congratulating him upon the carefully revised text, and the scholarlike edition of his author, which he has given to the public.

CRUMBS FROM A SPORTSMAN'S TABLE.

Crums from a Sportsman's Table. By Charles Clarke, Author of "Which is the Winner!" &c., &c. (Chapman & Hall.)

HUNTING or Sport by Flood and Field has ever been, and we trust ever will be, the distinguishing feature in the character of the Englishman. Be it by the cover-side, or sailing over the hundred-acre pastures of Leicestershire on a piece of horseflesh that none but this country can produce; be it with gun in hand, over the moors and stubbles of our British Isles; or even with the rifle and spear in the rugged jungles or sandy plains of Eastern climes, there are few nations that can compete with us. For the essential requisites which make up the *tout ensemble* of a thorough sportsman are those for which the

Englishman's character has ever been famous. It is not, therefore, to be wondered that we hail the publication of any work on these subjects with pleasure and interest; the more so, when we know that its pages contain truth and instruction, combined with grace, elegance, and sparkling wit. Since the days of the inimitable jockey Sponge, Handley Cross, and Jorrocks, there has been a vacuum which has only lately been filled up by the delightful pen of James Clarke. "Charlie Thornhill" was, we may rightly say, the first novel of this description, which, avoiding the coarseness, and unhampered by the conventional terms of stable language, made a stir in the literary world, and brought its author into well-deserved repute. Since then his pen has not been idle, and the present publication will, we feel convinced, hold a place not least amongst sporting works. The peculiar facility which the author has in describing anything in connexion with the hounds and horses, added to the faithfulness with which he sketches character and countries, is not one of the least of the charms of "Crumbs from a Sportsman's Table." The first volume contains a series of sketches of men and manners, such as are to be seen in the Midland Counties during the hunting season; and although we do not altogether take everything for gospel, yet the *tout ensemble* is so very much above the average of sporting writing, that we are inclined to enter somewhat lengthily into its merits and demerits. First, then, we are to suppose the author *en route* for a month's hunting in the grass counties—by the grass counties we need hardly say we mean Leicestershire and Northamptonshire. He introduces the reader to his uncle, his niece, and his uncle's stud; describes his uncle in a somewhat limited manner; his niece in still less lengthy terms; and shows his partiality to the animals by devoting more space to their various attractions than to either uncle or niece combined. For this we forgive him. At the end of the first chapter we are at the covert side, where the author picks out his first sketch or crumb in the shape of "Our County Member," which forms the subject for Chapter 2. Now we do not for one moment pretend to say that such people as Sir Nigel Templar have never existed; but we fear that the craving in the mind of the author that such an one *did* exist, has led him into somewhat too glowing a description. We are pretty well acquainted with the Midland Counties, and although we fancy we discern a resemblance, yet we take exception to certain things. The dress of Sir Nigel is no doubt faultless; and the boots are, *par excellence*, wonderful; but we imagine that there are few, if any, who sigh for the days back again when they rode four hacks to London, instead of a first-class carriage on the Great Northern. He concludes the sketch with these words:—

He knows too much of hunting for his neighbours, and cares too little about it now; but he loves a horse or a hound, and there is no beauty in any animal that he cannot admire, provided the beauty depends upon blood. He is regular in his attendance at church, as an example, and his nap when there. His strongest characteristics are high breeding, and his hatred to the memory or mention of Charles James Fox and the late Sir Robert Peel. He has lived on the whole well and honourably, not unprofitably, but somewhat selfishly; and when he dies, will leave no one to take his place.

We trust that this country contains many Sir Nigel Templars—indeed, we know it does—with all his good qualities, and his bad ones eradicated by the march of intellect and civilization, which "emollit mores nec sinit esse feros."

The description of Harry Fanshawe, the popular man and the squire, is, without doubt, one of the truest pictures the author ever drew. He says:—

First and foremost, he had a rent-roll of 20,000*l.* per annum, besides a very handsome slice of ready-money, the fruit of a long minority; and I do not think any man justified in being con-

sidered "The Squire" *par excellence* without a sufficient quantity of money to do at least as much good as will counterbalance the evils attendant upon self-indulgence. He was generous and fond of society, and, intending none, was suspicious of no wrong. He was a dauntless horseman, and at that time fell easy.

A grand climax, and one very much to be desired! But what every one must look upon as essentially true, is the monetary portion of Harry Fanshawe's character, to which we are common-place enough to ascribe the chief portion of his successes. Gold covers a multitude of sins; and no doubt if he had proposed to "hunt his own fox," as the author says, not a soul would have said him nay.

The question respecting what are commonly called Fox-hunting Parsons is rather a vexed one. The author's description of Parson Heathfield, and his defence of the practice of hunting amongst clergymen, requires, therefore, a little consideration. We are prepared at the outset to look somewhat more elementally upon the case, not from the arguments which are here brought to bear upon it, but from our own individual ideas upon this subject. The character of Parson Heathfield is one which is by no means a rare one. If the pleasures of the chase were confined to such as him, and to those of the cloth who enjoyed like incomes, we contend there would be nothing reprehensible. The vital question is—not as to the propriety of the action itself, but as to whether the indulgence of such pastimes does not in a measure prevent the engager in them from performing the duties of his sacred office. We cannot for one moment imagine that any one would be so narrow-minded or bigoted as to say that the driving of a pony carriage, the recreation of fishing, or a game of cricket, are engagements which should be denied to the clergyman; for these pleasures are within the scope of almost any one's means, and are not such as to wean his thoughts from graver and more responsible duties; the *mens sana* will not come without the *corpore sano*—and provided other duties are not neglected, there can be no harm in these. Hunting is another question. We contend that Parson Heathfield, in the enjoyment of the income the author allots to him, had a right to hunt three days a fortnight, for he could afford to keep a curate to assist him; added to which, we are not very certain that in a county like Leicestershire, where every one hunts, the presence of the parson is not only beneficial, but an opening of the door to many a man's heart, who would not otherwise listen. Be that as it may, the author's sketch of Parson Heathfield is one deserving of great merit, and we cordially re-echo his exclamation, when, alluding to the prejudices of certain persons who would deny the clergy every participation in the amusements of the world, he says, "Oh, you old Pharisees! just wash your own platters; the waters of the Wissen-dine are not the only things that soil the chastity of 'the cloth.'" The descriptions of the gentleman dealer and the London Division are both true and ludicrous. In alluding to the *début* of Mr. Peter Scripp, the London stockbroker, who suffered from a torpid liver, and imagined that hunting and country air were the sole panacea for his complaint, he gives a hint which may be said to be the soundest ever given to a man purposing to buy a horse who knows nothing about one. Instead of fraternizing with some horsey individual who wears tight trousers, cutaway Newmarkets, and horse-shoe pins, and who probably knows as little as he does—or, if he knows any more, makes his friend pay for the introduction—he does as Mr. Scripp did, and, to use the words of the author, addresses the dealer as follows:—

Mr. Yardmaine, I am a stockbroker, and know nothing at all about horses. I am obliged to go into the country for health—liver, you know Mr. Yardmaine; and I want four good horses to carry my weight; they must be pretty good hacks, and not jump too high, or I shall be tumbling off, you know. I shall leave it all to you. I can afford about

150*l.* a-piece for them. I daresay you'll do the best you can for me.

The consequence was, he had four good horses.

The author concludes his "Coverside Sketches; or, Part I. of Crumbs from a Sportsman's Table," by a pleasant, amusing description of Leamington and its attractions. We cannot, however, endorse the sort of universal censure he passes upon the men who hunt from the Spa. We conclude it must be some little time ago since the author visited it, and that when there he had some unfortunate rencontre which left an unfavourable impression upon his mind. Leamington has produced, and still produces, some of the best men that ever rode to a cover-side, who go straight, never crane or override hounds, and invariably ride a line of their own. The closing chapter, on "Ladies and their Habits," we would strongly recommend to those of our fair readers who purpose ever to make a *début* in the hunting-field. We leave this portion of the work with a regret which is somewhat alleviated by the contents of Part II. The first portion of this is devoted to the "Life of a Hunter"—an autobiography. We seldom recollect seeing so much useful information given upon the bringing up of a young horse, his education for the hunting-field, and stable management, than is here clearly and judiciously pointed out. There is, however, a manifest indiscretion, not only in this portion of the work, but pervading the two volumes, which we are sorry to see. We allude to the very disparaging way in which the author speaks of military men in connexion with horses, hounds, and hunting. Many of our very best judges and M.F.H.'s were and are still military men. The Army has ever been a good school for the bringing out of good material. No doubt the young sub, on joining, gives himself airs and graces; yet like a boy fresh from home on going to a public school, this sort of nonsense is soon taken out of him, and he acquires knowledge from the best of all monitors, "experience." The advice of the vet in page 271 to the master, is one which we should like to see more generally attended to. A horse suffering from a bad cough and cold is injudiciously physicked by his groom. The vet, in speaking to the master, says:—

The disease is quite lowering enough, without taking away the little strength they've got left. Just keep your eye on your own stable—see 'em when you like—ride 'em when you like—but don't give up the reins.

If every master did this, they would find themselves better off in pocket and horses, than by trusting to their head-grooms.

Many of the other subjects contained in Volume 2, having appeared in *Bailey's* and other magazines, it is almost unnecessary to comment upon them, with the exception of the closing chapter, the history of the Pycheley Hunt. The reminiscences of this truly (to the fox-hunters) sporting county, show a careful study of his subject, together with an immense facility of memory. We quite agree with the author respecting the game coverts, especially that on Braunston Hill, and we trust that the author's remarks may not be thrown away upon those who have the disposal and outlay of the 1,800*l.* per annum which is yearly expended to keep these coverts up. In conclusion, the hunting community, especially those who can afford to revel in a glorious burst over our Midland Counties, ought not lightly to feel the debt of obligation they are under to the author for this last, but truly not the least addition to the sporting library.

NEW NOVELS.

Grey's Court. Edited by Georgiana Lady Chatterton. Two Vols. (Smith & Elder.)

Left to the World. By Charles Beach. Three Vols. (Maxwell & Co.)

Hoods and Masks. By Captain G. de la Poer Beresford. Three Vols. (Charles J. Skeet.)

WE wonder if it is possible to construct a theory of bad novels. At first sight it

appears as if all writers would aim at a certain standard, and that all the bad ones would fall short of it, for want of the same qualities. But this is contradicted by experience. We find, as our circle of acquaintances enlarges, that even the most stupid differ from each other. There is the dogmatic fool, the weak fool, the paradoxical fool, the stupid fool, the dishonest fool, the historical fool, the logical fool, the sporting fool, the military fool, and so on to Macaulay's friend, the fool positive. Similarly, there is the unnatural novel, which aims at the strongest sensations, and only inspires that of disgust. There is the novel which bends nature to its rules, and the novel which avows a healthy independence of nature. There is the novel whose personages are not characters, and the novel whose characters are impersonal. We might fill columns with this enumeration, and be far as ever from our theory. The impossibility of harmonising bad novels is sufficiently shown by the three works at the head of our article, as they touch each other at few points, and have no virtual affinity. "Grey's Court" is a faint attempt at mystery, inspired, we should imagine, by Mr. Wilkie Collins, and told by means of the actors themselves, after the pattern of "The Woman in White." "Left to the World" is a hurry-scurry story, reminding us alternately of Captain Mayne Reid and *The New York Herald*, and turning chiefly on the misfortunes of people who lose each other in a crowd, and go to look in the wrong direction. "Hoods and Masks" has a flavour of theology and politics, but the story is so random, and the diction so intensely ludicrous, that we lose the thread of the one in the absurdity of the other. "Grey's Court" touches "Hoods and Masks" in the weakness of its mystery, and "Hoods and Masks" touches "Left to the World" in supreme extravagance, but we cannot discover the connexion between Mr. Beach and Lady Chatterton's protégée. We advise our readers not to take "Grey's Court," not to try on "Hoods and Masks," and to leave "Left to the World" to the world of trunkmakers.

The story of the first is more consistent than that of either of the other two, but there is less in it to make us linger. The wicked cousin, with a face of strange fascination, which sheds a kind of cold horror over the heart, who is suspected of murder all through the volumes, and turns out at the end to have been innocent, is a very stale character. We have met him in dozens of novels, and have learnt to disbelieve in him as thoroughly as we used to mistrust him. His semi-accomplice and subsequent butler, the returned convict, who tries to commit the murder of which the cousin is suspected, and succeeds afterwards in another murder, which comes to light like the one in "Eugene Aram," is also an old acquaintance. Naturally enough, our old acquaintances do nothing new, and we make our bow to them without an increase either of respect or admiration.

Our second novel is of a very different cast. It is entirely unlike any of the usual run of nineteenth-century fiction, and it contains some qualities that might prove of value to its author. The knowledge of wild life is large and new—the Mexican camp, the journey with the teams, the robbery by Mexican guerillas, the scenes with Irishmen and negroes in the States—are all described in a way which is forcible and life-like, if neither very elegant nor very artistic. We commend the scene in the second volume, where a man is left all night tied to a tree with a murdered comrade close beside him, and the "coyotes" of the plain turning from the dead to the living. But except in these rare passages, Mr. Beach seems determined not to court our praise. The coolness with which he disposes of a rather fair plot would be provoking, if he had paid any attention to the plot from the outset. As it is, we cannot complain of his saying that his heroes "could only conjecture" that some one who is introduced had done something

which does not appear, and that "this was the only way they could explain the mystery, and with this explanation the reader must be content." It is true that Mr. Beach adds: "If we were writing a work of fiction, we should have a fine opportunity of showing all the interesting particulars of the manner in which Maurice obtained that paper, and trace (sic) it from him to the possession of his grandfather; but we are not writing fiction, and, therefore, only record the incidents of which we have some knowledge." But we think this apology superfluous. We are quite content with what Mr. Beach gives us, as there is an amount of amusement in his slap-dash style which we could hardly expect if he was writing professed fiction. No novelist of our acquaintance would introduce such barefaced cynics as the characters of whom, we presume, Mr. Beach has some knowledge. A disreputable old woman prides herself on being so sharp, that any one who can beat her has only one more to beat to be safe in this world and the next. One of the heroines, in giving alms, tells the recipient that she gives her money in order to get rid of her. The book opens by one man calmly splitting his wife's head with a poker. Another man leaves his wife "without a dollar" or a house to live in; and boasts of having given her a lesson that will last all her life; while the girl to whom he boasts of it, "though she was not bad-hearted, could not help being pleased at the story." A third husband tells his wife on her death bed that he is delighted at getting rid of her; that she has made him very miserable; and that he is glad she is going where the wicked cease from troubling. We do not know if Mr. Beach endorses these sentiments, but he seems to enter heart and soul into the chivalry of a lawyer who is asked by a wronged husband to sue for damages. "Had you killed the man who robbed you of your wife," the lawyer replies, "I would with pleasure have defended you before a jury of your countrymen, and had you acquitted with honour; but you insult me by supposing that I will aid you in obtaining satisfaction in the contemptible way you wish. Such a detestable spirit, so unblushingly exposed, I never witnessed before. You are worthy of being classed with the gentlemen of Europe. Leave my office, Sir." We presume the moral of this tirade is, that we are at liberty to leave our wives penniless, to split their heads with a poker, and to tell them on their death beds that we are delighted at being rid of them, if we wish to earn Mr. Beach's esteem, and be classed with the gentlemen of America. We shall know how to conduct ourselves in future.

One line will serve for Mr. Beach's powers of description. He says of his hero, "There was nothing of the fox, monkey, or girl, in the form and expression of his features."

After this we pass to Captain Beresford. Much of the story of "Hoods and Masks," so far at least as we have been able to follow it, turns upon the Roman controversy. The scene is laid for a time in Rome; we are admitted to the Sistine Chapel during Holy Week, and we have private interviews with Cardinal Antonelli. One of the first requisites for a story abounding in Italian quotations is a corrector of the press who understands the Italian language. But the gallant captain has either failed to secure an efficient corrector, or has himself been guilty of the most stupendous blunders. We incline to the first solution, when we come upon a quotation from the poet Roger—such expressions as *entiam*, which we presume stands for *entrain*, "Oh Dola Napoli," and "Armonia." But when we find a lady's name written first Taranto, then Talermo, and then Palermo; when Allegri's "Miserere" is assigned to Palestrina, and grammar is ruthlessly violated, we begin to ask if the printer is the only culprit. After Mr. Beach's grand absurdities, it is almost an anticlimax to quote the somewhat milder ones of Captain Beresford. But what do our readers say to a contest for a theological prize at Oxford, at

which one of the competitors showed "a casuistry of doctrine, if we may use the expression, more in accordance with the Papistical institutions than the open, manly disputes of the English Church?" What are we to make of an Irish lady wedded to the Muses? An Irish lady indeed, if it be true, as many of us suppose, that the Muses themselves are of that sex. At the interview one of the characters has with Cardinal Antonelli, the Cardinal begins by a careful search in his guest's pockets to see that he carries neither pistol nor dagger, and adds: "I never remain in a room alone with any one, be he my own brother, without ascertaining whether he carries the means about him of depriving me of life." Specimens of the story we do not pretend to give; we fairly admit that we lost the thread of it very early in the first volume. Our feelings were like those of a host at a party given by his wife. Fresh arrivals came up, and we heard their names; but we knew nothing about them, and their characteristics were too vague to give us anything to take hold of. After entertaining his own guests at dinner, it is rather too hard on the gentleman of the house to repeat the experiment for the benefit of the party which the lady of the house has in the evening; and this must be our apology to Captain Beresford. We will show that we have skimmed the volume conscientiously by quoting the following note from a chapter on the Crimean war:—

Since writing this, a work, presuming to be historic, has appeared on the subject of this war. Although unqualifiedly condemned by the press and the nation as a scurrilous, libellous, and disloyal production, some going so far as to say ungrammatical, still, in future days this book even may be regarded as history. The malevolence of the author, who attacks the private characters of the French generals, and the personal courage of the great Emperor, is charged by some as actuated by motives of jealousy of a lost mistress to that nation; and yet the liberty of our press permits this truly offensive and untruthful book to go abroad to the world.

Mr. Kinglake will hardly care to retaliate.

The Publications of the Surtees Society. Vol. xlv. *Testamenta Eboracensia: a Selection of Wills from the Registry at York.* Vol. iii.—These wills belong to the years 1395-1491; accompanied by a large number of valuable inventories. The volume contains also a list of all the licences and dispensations for marriage, and the names of all the widows who took the vow of chastity, which appear in the register of the archbishops of York, the bishops of Durham, and the archdeacons of Richmond, beginning with the reign of Richard II. The vowesses, as they were called, were not severed from the world, but could live in it, and make a will, and dispose of their property as they chose. Sometimes, for the sake of a stricter and more retired life, they took up their abode in or near some monastery, particularly a nunnery. The whole subject opens out a new phase of mediæval life. Another volume is in progress, being the concluding volume of the "Memorials of the Priory of Hexham." This will contain an imprint of the "Black Book of the Monastery." Besides this, a second volume of the "Memorials of Fountains Abbey" is now ready for the press, to be illustrated with engravings. The "Letters and Household Books of Lord William Howard, of Naworth," "Belted Will," is announced. Altogether, the Surtees Society seems unusually active and successful.

Les Confidences d'une Puritaine. Par Max Valrey (London and Paris: L. Hachette & Co.)—This story is by no means so curious as the title leads us to anticipate. The female Puritan tells us some love-passages in her life; but these are of a perfectly decorous sort. She makes mistakes, but commits no sin. Her failing is to have too strong a notion of her own importance; first, to despise those who, less philosophic than herself, are weak enough to fall in love, and then to be herself the victim of an unrequited passion. Her punishment is to witness the marriage to another of the man who would not reciprocate her attachment, and for whom she would have made any sacrifice. The story is cleverly told. There is nothing either offensive or very at-

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tractive in the volume, and it may fairly be recommended as suitable reading to those who like a French novel not wholly devoid of interest, yet unspiced with vice.

Histoire de la Littérature Grecque. Par Alphonse Feillet. (London and Paris: L. Hachette & Co.)—Messrs. Hachette have already published a very useful collection of books suitable for the perusal of girls. To this they are about to add a series of works of a more strictly educational kind. The volume under our notice is one of them. It contains a readable outline of Greek literature, and is so executed as to attract at the same time that it instructs. The author wisely refrains from making a parade of erudition; his object being to teach his countrywomen something about the literature of the greatest nation of antiquity. This object is a most laudable one; for, in all that relates to such matters, French ladies are deplorably ignorant. It ought to be added, perhaps, that in this particular they are nearly on a par with their English sisters. The perusal of this volume will do much to impart an amount of knowledge which it were a disgrace not to possess.

The Law on its Trial, or Personal Recollections of the Death Penalty and its Opponents. By Alfred H. Dymond. (Alfred W. Bennett.)—Whether or not the punishment of death should be inflicted, is a problem which can be solved by those only who take into account all its social bearings. To show that executions are so conducted as to be a scandal, and that persons are sometimes executed without being guilty of murder, produces an effect on the unthinking, but proves nothing. If it be wrong to hang a man, it matters not that the execution should be conducted in a decorous manner or the reverse. But Mr. Dymond seems to think that this has much to do with the point at issue. Certainly, he has collected together a number of very shocking stories. We should have preferred if he had treated the subject without so many appeals to our sympathies, and with more appeals to our understandings.

Cape Cod. By Henry D. Thoreau. (Sampson Low & Co.)—Thoreau has been styled an American Rousseau. We may employ Coleridge's phrase about Klopstock and Milton, and say that he is, in truth, a very American Rousseau. He has all the egotism of the great French writer, without possessing a tithe of his literary skill. His volume is interesting on account of containing a notice of a place of which we know better by name than in fact. The production of a man who carried his independence to the verge of eccentricity, it is a curious work, and will repay perusal, although hardly deserving our praise.

Iron: its History, Properties, and Processes of Manufacture. By William Fairbairn, C.E., LL.D., F.R.S., &c.—This is a new edition of a work enlarged from a treatise which appeared in the eighth edition of the "Encyclopædia Britannica." It gives a complete and interesting account of the various processes and manipulations in the manufacture of iron and steel, tracing them from their rude, primitive condition in the earliest ages down to the highest stage of improvements in the present time. The mechanical means employed in the production of iron will be found clearly described and illustrated by suitable engravings. We may mention as especially interesting the chapter devoted to the description of the details of the Bessemer process. We are pleased to see that Mr. Fairbairn recognises the almost forgotten merits of one to whom we owe something of our national greatness. We refer to Mr. Henry Gort, of Gosport, who first introduced the processes of puddling and rolling iron, by which he conferred on the country an amount of wealth equal to 600 millions sterling, and gave employment to 600,000 of the working classes for more than three generations. It is one of the blots on our escutcheon, that a man who by his genius and enterprise so largely contributed to the prosperity of his country, should have been left to starve and die, unknown and forgotten, and that his descendants should be suffered to live in penury and want by the posterity who have profited by his labours. The engineer will value the large number of tables which are dispersed throughout this book; in these are given the most important results of experiments conducted by Mr. Fairbairn and other eminent authorities. Engineering pupils and other students will find in it all essential information on iron, and in addition, this work has supplied a long-felt want of a ready reference book for the manufacturer, containing as it does a quantity

of valuable information concisely arranged. Mr. Fairbairn's name alone, apart from any commendation of ours, would suffice to secure this new edition an extensive circulation.

PUBLICATIONS OF THE WEEK.

- Æsop's Little Fable Book. 18mo, cl. sd., gilt, pp. 72. *Nimmo*. 6d.
- ANDERSEN (Hans Christian). Tales and Fairy Stories. Translated by Madame De Chatelain. New Edition. Illustrated. Fesp. 8vo, pp. vi.—401. *Routledge*. 3s. 6d.
- ARNOTT (Neil, M.D., F.R.S.). Elements of Physics; or, Natural Philosophy. Written for General Use in Non-Technical Language. 6th and Completed Edition. Part 2. 8vo. *Longmans*. 10s. 6d.
- ASPINALL (W. B.). San Remo as a Winter Residence. By an Invalid. 1862-5. With Engravings. 2nd Edition. Fesp. 8vo, pp. viii.—128. *Churchill*. 4s. 6d.
- BARCLAY (Robert). On the Truth of Christianity. Compiled from "Lessons on the Truth of Christianity," and other Works of Archbishop Whately. With Introduction, &c. Edited by the Right Rev. Samuel Hinds, D.D. 18mo, sd., pp. xvi.—115. *Longmans*. 6d.
- BENNETT (J. Henry, M.D.). Winter in the South of Europe; or, Mentone, Riviera, Corsica, Sicily, and Biarritz as Winter Climates. 3rd Edition. With Maps and Illustrations. Post 8vo, pp. xi.—442. *Churchill*. 10s. 6d.
- Boy's Shilling Book (The) of Sports, Games, Exercises, and Pursuits. By Writers of "The Boy's Own Magazine." Illustrated. 12mo, sd., pp. 228. *Warne*. 1s.
- BOYS (The) of Holy Writ and Bible Narratives. With Coloured Illustrations. Fesp. 8vo, pp. 296. *Warne*. 3s. 6d.
- BYRON (Lord). Don Juan. New Edition. Fesp. 8vo, bds., pp. 475. *C. H. Clarke*. 2s.
- CALMET's Dictionary of the Bible. Abridged, Modernized, and Re-edited, according to the most recent Biblical Researches. By Theodore Alois Buckley, M.A. New Edition. Fesp. 8vo, pp. vii.—720. *Warne*. 5s.
- CASELL's Popular Natural History. New Issue. Mammalia. Vol. 2. With Illustrations and Coloured Engravings. Cr. 4to, pp. viii.—376. *Cassell*. 10s. 6d.
- CLARK (W. R.). Self Knowledge and the Four Temperaments: a Series of Sermons. 12mo. May (Taunton). *Rivingtons*. 2s.
- DALZIEL's Illustrated Arabian Nights' Entertainments. The Text revised and emended throughout by H. W. Dulcken, Ph.D. Vol. 2. With 100 Illustrations. Imp. 8vo. *Ward & Lock*. 7s. 6d.
- EDWARDS (Mrs.). Miss Forrester: a Novel. 3 Vols. Post 8vo, pp. 867. *Tinsley*. 31s. 6d.
- EVANS (Sebastian). Brother Fabian's Manuscript; and other Poems. Fesp. 8vo, pp. 270. *Macmillan*. 6s.
- FEW TREASURES (A) from the Great Mine. 18mo, cl. sd. *Wesley*. 1s.
- FUN. Vol. 8. (Vol. 1, New Series.) 4to. *Office*. 4s. 6d.
- GLEN (W. Cunningham). Law of Highways: comprising the Highway Acts, 1835, 1862, and 1864; the South Wales Highway Act; the Decisions of the Courts on the Subject of Highways, Bridges, Ferries, &c., including the Law of Highways in Local Board of Health Districts; Highways affected by Railways, and Locomotives on Highways. With an Appendix of Statutes relating to Highways. 2nd Edition. Post 8vo, pp. xxxvi.—764. *Butterworths*. 20s.
- GRAHAM (F. R.). Progress of Science, Art, and Literature in Russia. Cr. 8vo, pp. 480. *James Blackwood*. 7s. 6d.
- GRAHAM (W., LL.D.). Exercises in Etymology. New Edition, improved. 12mo. *Chambers*. 2s.
- GRAVES from the Great Vine. 18mo, cl. sd., gilt, pp. 72. *Nimmo*. 6d.
- GREAT LESSONS for Little People. 18mo, cl. sd., gilt, pp. 72. *Nimmo*. 6d.
- GERIN (Eugénie de). Journal of. Edited by G. S. Trebutien. Cr. 8vo, pp. 400. *Simpkin*. 7s. 6d.
- GUIDE (A) to the Excursions of the British Association, Birmingham, 1865. Fesp. 8vo, sd., pp. 35. *Cornish* (Birmingham). 1s.
- HALL (Major Herbert Byng). Queen's Messenger; or, Travels on the Highways and Bye-ways of Europe. Cr. 8vo, pp. xi.—404. *J. Maxwell*. 16s.
- HERMIT of the Hills (The), and other Stories. 18mo, cl. sd., gilt, pp. 71. *Nimmo*. 6d.
- How to be Saved; or, the Sinner Directed to the Saviour. By J. H. B. Revised by the Author of "Sunset Thoughts." 64mo, pp. 144. *Hamilton*. 6d.
- HUGHES (Rev. Hugh, D.D.). Female Characters of Holy Writ. New Edition. With Coloured Illustrations. Fesp. 8vo, pp. vii.—336. *Warne*. 3s. 6d.
- JENKINS (Henry). Selections from the Old and New Testaments. Cr. 8vo. *James Blackwood*. 7s. 6d.
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- LEE (Mrs. Frederick George). The Departed, and other Verses. Fesp. 8vo, pp. 64. *Hayes*. 2s. 6d.
- LESSONS on the Liturgy, for Bible Classes. 16mo, pp. x.—146. *Church of England Sunday School Institute*. 1s.
- LIGHT in Dark Places; or, Whispers to the Sad and Sorrowing. By the Author of "Sunset Thoughts," &c. 64mo, pp. 128. *Hamilton*. 6d.
- LIVES of the British Poets: with Specimens of their Writings. With Illustrations. Fesp. 8vo, pp. 376. *Nimmo*. 3s. 6d.
- MACLAREN (Alexander). A Spring Holiday in Italy. 8m. post 8vo, pp. v.—229. *Palmer & Howe* (Manchester). *Simpkin*. 4s.
- MERCANTILE NAVY LIST (The) and Maritime Directory for 1865. Compiled from Official and other Sources by the Registrar-General of Shipping and Seamen. 8vo, pp. xi.—401. *W. Mitchell*. 5s.
- MONTGOMERY (Hon. Mrs. Alfred). Bucklyn Shaig. A Tale of the Last Century. 2 Vols. Post 8vo, pp. 615. *Bentley*. 21s.
- MURRAY's Handbook for Travellers on the Continent: being a Guide to Holland, Belgium, Prussia, Northern Germany, and the Rhine from Holland to Switzerland. With Map and Plans. 15th Edition, Corrected. Post 8vo, pp. xi.—603. *Murray*. 10s.
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- Tables of Stone: Stories of the Ten Commandments. 18mo, cl. sd., gilt, pp. 72. *Nimmo*. 6d.
- OXFORD POLL BOOK (The): An Authentic Copy of the Poll for the Two Burgesses to Serve in Parliament for the University of Oxford. July, 1865. By Authority of the Vice-Chancellor. 8vo, sd., pp. 100. *Clarendon Press*. 1s.
- PEARLS for Little People. 18mo, cl. sd., gilt, pp. 72. *Nimmo*. 6d.
- POY of Gold (The), and other Stories. By the Author of "Four Little People and their Friends," &c. 18mo, cl. sd., gilt, pp. 69. *Nimmo*. 6d.
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- SHAKESPEARE (William). Works. Edited by William George Clark, M.A., and William Aldis Wright, M.A. Vol. 7. 8vo, pp. xiii.—524. *Macmillan*. 10s. 6d.
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OBITUARY.

THE Rev. Dr. Richard Williamson, Vicar of Pershore, in the diocese of Worcester, an honorary canon of Worcester Cathedral, and formerly head master of Westminster School, died at his vicarage on the 14th inst. He had been in ill health for some time, and had lost his voice almost entirely. Dr. Williamson was educated at Westminster as a town boy. From Westminster he went to Trinity College, Cambridge, whence he graduated in 1825 as seventh wrangler and fourth classic, obtaining in 1827 the Members' prize for Latin Essay. In 1828 Mr. Williamson, then a Fellow of Trinity, succeeded Dr. Goodenough—promoted to the deanery of Wells—as head master of Westminster, and retained that position till 1846. In 1835 he became D.D. by Royal mandate. Among the distinguished men whom Dr. Williamson educated may be named Dr. Cotton, Bishop of Calcutta, the Duke of Richmond, Lord Henry Lennox, M.P., the Marquis of Lansdowne, the Earl of Uxbridge, Lord R. Grosvenor, M.P., Mr. Herbert Wynn, M.P., &c. Dr. Williamson commenced his career at Westminster by reforming certain abuses and irregularities which his predecessor had allowed to creep in; the first of which, the want of punctual attendance of the town boys by nine o'clock of a morning, he attempted to check by a written notice, that in future any boy not answering to his name at that hour would be severely punished. The following morning the boys were all punctual to a second, and upon the clock striking nine they barred the doors, shutting out the doctor, and chaffing him as one who was assuming the doctor's name to get himself smuggled in in time to escape the threatened flogging. The doctor after this wisely removed the obnoxious notice. Dr. Williamson introduced a great improvement in the production of the plays of Terence, by substituting classical costume for the barbarous dresses formerly in use; and wrote a treatise on Grecian costume, *à propos* of this alteration, with the title of *Eunuchus Palliatus*. In 1844 Dr. Williamson became vicar of Sutton Coldfield, during the minority of the present vicar, his old pupil, the Rev. W. K. Riland Bedford, and held the living till 1850, when he was presented by the Dean and Chapter of Westminster to the vicarage of Pershore, Worcestershire, worth about 400*l.* a-year. In 1851 the Bishop of Worcester made him an honorary canon of Worcester Cathedral. Dr. Williamson was a lover of church architecture, and restored his church a year or two ago, at a great cost. The doctor married a daughter of Bishop Gray, of Bristol, a sister of the Bishop of Cape Town.

THE American papers record the death of Mr. George Livermore, of Cambridge, U.S., on the 30th ult., at the age of fifty-six. Besides the papers contributed by him to learned societies, he was a contributor to *The North American Review* and other periodicals. His chief work is entitled "Historical Research respecting the Opinions of the Founders of the Republic on Negroes as Slaves, as Citizens, and as Soldiers," an octavo volume of some 300 pages, which he printed and circulated at his own expense. Mr. Livermore was widely known on both sides of the Atlantic as a collector of rare books, and is said to have died the possessor of a library which, in some departments, was equal to any in America, and in its treasures of Bibles and Testaments was without a rival.

WE have to record the death of the Rev. C. E. Oakley, Rector of St. Paul's, Covent Garden (whose name was mentioned generally last week, in an unfounded rumour, in connexion with the Bishopric of Melbourne), at Rhyl, in Wales, on Friday, the 15th instant, in his thirty-third year. Mr. Oakley was appointed to the rectory in 1863, on the death of the Rev. Henry Hutton. He was a man of singular powers, and had a happy way of making himself liked by everybody with whom he was brought into contact. Connected by marriage with a noble family, and having ample pecuniary means at his disposal,

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he threw himself heartily into the work of the parish, whose supervision he had accepted; and all classes, Churchmen and Dissenters alike, flocked around him. Mr. Oakley published in 1855, an account of the English translation of the Bible. He was a pupil of Dr. Tait at Rugby, and graduated in high honours at Oxford in 1855. Ordained in 1856, he was for seven years rector of Wickwar, in Gloucestershire. He married Lady Georgiana, a sister of the Earl of Ducie, the patron of that living, by whom he leaves a large family of young children. Lady Georgiana seconded most zealously all his efforts, and her loss to the parish will be felt scarcely less than that of her lamented husband.

"PEACE be to the dead! Regret cannot wake them." So wrote Byron to Dallas, in recording the death of his friend, Charles Skinner Matthews, "one of those rare individuals," says Moore, "who, while they command deference, can, at the same time win regard, and who, as it were, relieve the intense feeling of admiration which they excite, by blending it with love." Matthews, the pride of the University, was drowned in the Cam in August, 1811. We have the sorrowful duty to record the death of one by the same fate, whose future, like that of Byron's friend, promised to be a far more brilliant career than falls to the lot of most men. We do this in the words of one who knew him well, Dr. Mortimer, under whom he was educated, at the City of London School, and who mourns his untimely fate, as if he had been a loved one of his own. "Mr. Henry John Purkiss, B.A., of Trinity College, Cambridge, Principal of the Royal College of Naval Architecture, South Kensington, was drowned on Sunday, while bathing in the Cam. He was only twenty-three years of age, but his career had been one of almost unexampled success, and gave the highest promise of future usefulness. While still a boy at the City of London School, he obtained the first Queen's Prize ever given at South Kensington to a schoolboy, the Mathematical Matriculation Scholarships of the University of London, and a minor scholarship at Trinity College, Cambridge. Proceeding *pari passu* in both Universities, he came out at Cambridge senior wrangler and first Smith's prizeman, and took successively the three mathematical scholarships of the University of London, and the degree of M.A., with the gold medal. He thus attracted the notice of Lord Granville, the Chancellor, who offered him the post of vice-principal in the newly-established Royal College of Naval Architecture, and after one session, his first and last, raised him to the principalship. Possessed of high talents, accurately trained, and devoted for their own sake to his favourite studies, Mr. Purkiss was made of the stuff from which great discoverers, the benefactors of mankind, are fashioned. During the eighteen months which have passed since his degree, he had nearly prepared for the press a volume on dynamics, and had entered upon a careful examination of the phenomena of the variation of the compass in iron vessels, in the hope of discovering some general law to which they were all subject."

THE Stuttgart papers announce the death of Traugott Bromme in that city on the 4th inst., in his sixty-fourth year. His travels in North America (Reisen durch die Vereinigten Staaten und Ober Canada), were reprinted in German, in three octavo volumes, at Baltimore, in 1834. Herr Bromme was formerly a bookseller at Dresden, but since 1844 he has been resident at Stuttgart, devoting himself to geographical pursuits, and producing, amongst other honourable memorials of a useful life, the atlas to Humboldt's Cosmos.

THE Rev. Robert Young, of Auchterarder, who was the innocent author of the Disruption of the Church of Scotland, died at the close of last week. Mr. Young's presentation to Auchterarder in 1833 being opposed, gave rise to the famous Auchterarder Case, which, carried through all the courts, was decided finally in the House of Lords, in August, 1842, in his favour, and was followed by the great secession, of which Dr. Chalmers was the leader, and which resulted in the organization of the Free Church.

THE Orchestra announces the death last week of Mr. George Linley, who, for half a century, has been the most prominent ballad-writer of this country. Out of the thousand and odd lyrics which he owned to having written or composed, many have, in their time and season, delighted firesides of English people at home and

abroad. Of these are such ballads as "Little Nell," "Constance," "Thou art gone from my gaze," "Ever of thee," and very many more.

CORRESPONDENCE.

THE CATTLE PLAGUE AND VIRGIL.

To the Editor of THE READER.

Sir,—“An Oxford M.A.” is very angry with me in venturing to differ from him. Really, my remarks were not intended to convey “any contemptuous attack,” and if your correspondent will be kind enough to point out any expression of mine that bears out his statement, I will retract it at once. The “Oxford M.A.” appears to be satisfied that the *miranda tempestas* of Virgil is identical with the present cattle-disease; I am not so satisfied, and I have given my reasons for venturing to differ from him. I have stated that the symptoms enumerated by Virgil are equally applicable to the well-known pleuropneumonia, and indeed to other inflammatory diseases, and that, therefore, they cannot furnish any trustworthy diagnosis of a specific disease. If your correspondent will just glance at the first chapter of Vegetius on the general symptoms of sick animals (*quibus signis agritudo animalium cognoscatur*), he will find almost all the characteristics which he has enumerated as belonging to the present cattle disease distinctly mentioned; there is the “*anhelitus crebrior aut gravior*,” the “*os asperum et solito ferventius*,” the “*tussis aliquando lenis aut gravior*,” the “*aures flaccidi*,” the “*erecti pili*,” &c., &c. Now, this was the point of my first letter. The symptoms described by Virgil are so vague, and so generally characteristic of various brute diseases, that nothing like a real diagnosis can be established. Your correspondent says that all along he has distinguished the poet from the matter-of-fact prose writer, and yet he draws his conclusions as to the identity of the ancient and modern plague entirely from the poet of Mantua. I should not have troubled you with any reply to the offended correspondent, had I not wished to draw attention to this illustration of the manner in which, as it seems to me, people, in matters of graver importance, “jump to a conclusion.”—I am, Sir, yours obediently,

THE AUTHOR OF “THE CONTEMPTUOUS ATTACK.”

“RELIABLE” AND ITS CONGENERS.

To the Editor of THE READER.

Sir,—Five years ago, Dr. Worcester, in the latest edition of his Dictionary, was pleased to run a heedless tilt against the well-abused epithet *reliable*; and, in your last issue, “F. G—n” attempts to justify himself for having previously (p. 230) stigmatized it as a “vile word.” Let us examine his objections to it.

“It is formed ungrammatically,” he alleges. If so, equally are *demurrable* (Hallam), *dependable* (Pope), *disposable*, *indispensable*, and *laughable*. Add to these your correspondent “F.’s” *unaccountable* and *unsearchable* (p. 265); “F. G—n’s” argument against them being invalid. To *account* is not to *account for*; and *search* implies something different from *search out* or *search into*: and, though *account* and *search* are actives as well as neuters, it is with the latter that the fore-named adjectives are connected, as their very sense shows. In the same manner, for instance, *disposable* is from *dispose of*, not from *dispose=arrange*; and *indispensable* is from *dispense with*, not from *dispense=deal out*.

We should have had, moreover, to swell our list, *unappealable*, if Coleridge (*Confessions of an Inquiring Spirit*, p. 58) had not chosen to coin, in preference, the latinistic *inappellable*, the verb in which must be referred to *appello*.

In *available*—including its negative—we have a still more noticeable anomaly than any of those above mentioned. Indeed, I am not aware that it has a strict parallel in our language. *Deprivable*, judged by modern English, is an irregularity; but in Hooker’s day *deprive* signified *depose*, in ecclesiastical phraseology.

Some of the words here noted did not, to be sure, survive the candidate stage of existence; but the very fact that so many of their kindred have come to be accepted as legitimate is sufficient proof that the genius of our tongue by no means absolutely abhors such formations. However unadvisable it may be to enlarge the anomalous class to which they belong, it is plain, then, that *reliable* is not without analogues of recognized classicality. But, even if no precedents whatever for it were producible, it would be an error to speak of it any longer as

being “formed ungrammatically.” Usage, the arbiter of what is grammatical, has determined otherwise.

We are told, again: “It is quite modern; appearing first, I think, in the newspapers about nine years ago, during the Crimean War.” An assertion of this sort is always extremely risky. S. T. Coleridge used it in 1822. See his “Letters,” &c. (ed. 1836), Vol. ii., p. 78. “F. G—n” found it in Webster’s Dictionary, ed. 1856. And he will find it in the ed. of 1848, also.

“F. G—n” continues: “I am aware of no good writer but Mr. Lowndes having used it.” Somewhere in limbo I have a list of thirty or forty “good writers,” as I count them, to whom the word has proved acceptable. Among these was, of course, Coleridge; and it occurs to me that Mr. J. S. Mill has not scorned “reliable.” See his “Considerations on Representative Government” (ed. 1861), p. 290. Also see Rawlinson’s “Bampton Lectures” for 1859, pp. 48, 49. And Worcester quotes Sir Robert Peel, Daniel Webster and Edward Everett, as being Americans, are, I suppose, out of court—not to be ranked among “good writers.” Are, however, the writers in *The Saturday Review*, and the editors of *The Times*, worthy of being so designated? For *reliable* seems to be, with them, rather a favourite.

Furthermore, according to “F. G—n,” “It is quite unnecessary. Your correspondent gives us the word *trustworthy*, which answers every purpose that can be served by *reliable*, and is so good a word as to want no complement that I can see.” Now, if *trust* or *trust to* or *in*, and *rely on*, or *trust* and *reliance*, are not synonyms—and certainly they are not, in the true sense of the term—*reliable* is a genuine accession of value to our vocabulary. Without impoverishing exactness and flexibility of expression, we can no more do without *reliable*, now that we once have it, than we can do without *rely* or *reliance*.

Lastly, “F. G—n” inquires: “Will your correspondent’s ear and English associations not only reconcile him to *reliable*, but prepare him to accept the family which the word may and probably will beget—*unreliable*, *unreliability*; together with the couples *defective reliability*, *slight reliability*, and such like?” If one correspondent may answer for another, I would ask whether *reliable* and *unreliable* are more dissonant than *deniable* and *undeniable*. *Reliability* and *unreliability* are about as likely to be written as *deniability* and *undeniability*. The ear would, with me, prefer to annex the Saxon ending; and *unreliableness* has nothing shocking about it, to my sense of euphony. And a man’s “English associations” must be exceedingly peculiar, if *reliable* is not, to him, a vocable of perpetual recurrence. A few timid or uninquiring purists alone excepted, no good writer or speaker of the present day appears to scruple at it. Is not it rather Quixotic, too, of “F. G—n” to contend against what he confessedly believes will “probably” come to pass?

“F. G—n” describes himself as one “acquiescing in such an established usage as it is plainly hopeless that I or anyone else can now hope to change.” Let him, then, give in his adhesion at once in favour of *reliable* and its progeny; it being, as I apprehend, vitally engrafted on our language, and impossible of eradication; and seeing that it is constructed agreeably to analogy; and inasmuch as the idea which it conveys finds no other expression save at the cost of a cumbrous periphrasis.

But “F. G—n” has erred in good company. De Quincey (*Selections Grave and Gay*, Vol. xi., p. 244) has written as follows: “Alcibiades was too unsteady and—according to Mr. Coleridge’s coinage—*unreliable*; or, perhaps, in more correct English, too *unrelyuponable*.” The *Literary Churchman* has denounced *reliable* as “this ungrammatical Americanism,” as “a learned Americanism,” as, somewhat inconsistently, a royalty of “our dreadful cockneys,” and as “absurd.” Yet, while thus condemning it (1860, pp. 3, 442, &c.), this paper admitted it in an original critique (p. 390). In the *Saturday Review*, No. 283, it is jibed at as Mr. Shirley’s “Jupiter English;” though it had been employed in the same paper, only fourteen pages before, in a leading article. In short, the various strictures which I have seen on this word would fill a couple of columns like the present; and I have never seen any defence of it but “F.’s.” So much for the thoughtlessness of the ruck of verbal critics.

In conclusion, I would ask whether there is any worse demerit in *talented* than its imagined Transatlantic origin.—Your obedient servant,

India Office Library, Sept. 19.

F. H.

POLITICAL ECONOMY FOR THE MILLION.*

THE people's edition of Mr. Mill's works is very cheap; but it deserves to be universally known that it could not have been so cheap as it is, had not the author voluntarily given up all the profits of its sale. There is only one advance upon this we should like to suggest—namely, that the portions of the "Principles of Political Economy" which affect the labouring classes, should be printed and sold separately from those which form the scientific part of the work. For the book consists, in reality, of two different treatises: one on the distribution of wealth and what are ordinarily called the phenomena of capital, and the other on man, not so much as he is, but as he may be under better principles of association; and the absence of an index, which is perhaps unavoidable, renders it very difficult even for a practised student to revert to the passages he most wishes to consult.

In one of his earlier essays, Mr. Mill complains that a person can only now hope to exercise an influence on his contemporaries by editing or writing for a newspaper, or by being a Member of Parliament. He has shown himself that there are other writings besides journals which can be appreciated by his countrymen, and that such appreciation may eventually culminate in the voluntary elevation of a philosophical writer to a seat in the Legislature. He also desired that some sort of tribunal should be established, which should at once set its mark upon any publication which deserved attention, so as to place the labours of genuine thinkers somewhat above the chances of popular caprice or negligence. Perhaps it is as well that the difficulty of such an undertaking has prevented any attempt of the kind; but we are led to this reflection by his observation, that improvement is proceeding at so rapid a rate, that, to keep pace with the philanthropy of the age, it would be necessary for him to be perpetually re-writing his book. We doubt if this could be held a sufficient excuse for anyone who continues to reap the profit which always follows from fresh editions of a popular text-book, were not all strictures to that effect at once stopped in this case by the disinterestedness of the writer. And even here it may be questioned whether any more useful or more honourable task can ever be undertaken, than the perpetual revision of any work which is held to be a standard authority on a growing science; and that, if such a labour is uncongenial to the original writer, whether the "noting up," as the lawyers say, of "Elements," and "Principles" could not be handed over to some kind of literary committee, though it might be unsafe to entrust such a body with the power of affixing their stamp of approbation to any entirely new performance.

The fresh matter, however, including the notes to this new edition, are by no means unimportant. What will, perhaps, attract the most notice is, that Mr. Mill has become a complete convert to the benefit of the custom, if not actually to

the law, of primogeniture. "In the case of capital employed in the hands of the owner himself, in carrying on any of the operations of industry, there are strong grounds for leaving to him the power of bequeathing to one person the whole of the funds actually engaged in a single enterprise. In like manner, it should be allowed to a proprietor, who leaves to one of his successors the moral burden of keeping up an ancestral mansion and park or pleasure-ground, to bestow along with them as much other property as is required for their sufficient maintenance." Add to this case, as we should have to do, those establishments which are on the point of becoming enterprises of any magnitude; those fortunes which a successful trader wishes to be invested in the purchase of a mansion and estate; and those landed properties, which have not perhaps at the moment a mansion and park, but which are still ancestral properties—and the case for the law of primogeniture is as well made out as anyone can desire.

The remedies once suggested by Mr. Mill for altering the habits of the labouring people were, an effective national education, and a system of measures which should extinguish extreme poverty for one whole generation—such as a great national plan of colonization, and the devotion of all common land, hereafter brought into cultivation, to raising a class of small proprietors. He now says these ideas remain true in principle, though it is no longer urgent to apply them at once to the present state of this country. Spontaneous colonization may prove sufficient to effect a material rise of wages in Great Britain, and to maintain that rise unimpaired for one or more generations.

We have always been of opinion that this chapter is the weakest in the book. Any attempt to raise the wages of the working class by any other means than limiting the increase of the population, would not only involve the false principle of doing that for others which they can only do successfully for themselves, but would inevitably fail to have the desired effect. It would probably have an exactly opposite tendency, for nothing is more clearly proved than this: that when wages are high, and work is plentiful, the population begins to increase more rapidly than before. Build more and better cottages, and they would only be filled all the quicker: nay, if too large for the family, supernumerary lodgers would at once be accommodated in them. Were wages suddenly to rise in this country, the Anti-Malthusians and the whole class of religious optimists, would at once point to the fact as a proof of the fallacy of setting any limit to the increase of population. And if it occurred through anything like an artificial cause, the inevitable consequences would soon be felt. An unwillingness to emigrate would ensue, and what had been done once by the Government would soon be called for again. The other remedy of breaking up all common ground would be still more pernicious. It would be, in fact, simply an increase of population coupled with a diminution of what might prove a recourse in case of extremity. No greater misfortune could possibly happen than to have every available spot of ground elaborately cultivated, before the labouring class have not only learnt or been taught in theory, but

have actually put in practice, the power they possess of limiting their own numbers. This must precede, not follow, any measures for their benefit, of which they will then have time and leisure to make themselves the best judges. We are convinced that nothing but stern necessity can inculcate upon them this great lesson, and we have always felt sorry that Mr. Mill should have pointed to any other method of improving their condition. It is not education, but constant and open instruction on this vital subject which can be of any avail. Their future will then be in their own hands, and they will not be slow to use it to their own advantage.

The praise bestowed upon Fourierism is very judicious. That wonderful system presents at first sight so much that is objectionable to English feelings, that it needs a skilful advocate to introduce it to serious notice. We are glad Mr. Mill has done this. The application of the principles of co-operation to agricultural labour can only be effected under some analogous organization. Fourier, indeed, thought that it required a people of peculiarly gentle manners and versatile habits to inaugurate his plans; and therefore looked to the neighbourhood of Paris for assistance. But the first necessity is legal freedom, and this is to be found neither in France nor even in America, and in the latter country a dense population is wanting, another condition of success. In England every essential is to be found; and those who are afraid that every form of Socialism tends to bring down all to a common level, will do well to look at the brilliant careers in love, wealth, and ambition which are opened to the inhabitants of the Phalanstere under the rule of Harmony. The acquisition of riches will there find many a fresh incentive, and the provisions for gratifying at once the caprices of testators and the interest of legacy-hunters are singularly ingenious. The followers of Mill are well aware that, so far as he aims at what is practical, his object is a better re-arrangement of social conditions, and we could wish that he would do for the Socialism of Fourier what he has done so recently for the philosophy and economics of Comte in the pages of *The Westminster Review*.

MISCELLANEA.

READERS who take interest in the "Paston Letters," and in the question raised as to the genuineness of their style and language, will be glad to know that a MS. volume, now lying in the library of Lambeth Palace, of Bishop Beckington's Letters, is being prepared for publication under the auspices of the Master of the Rolls. The editor is the Rev. George Williams, Senior Fellow of King's College, Cambridge, and the full title of the book is "Official Correspondence of Thomas Bekynton, Secretary to Henry VI., with other Letters and Documents." The work will be a valuable supplement to the Journal of the Bishop's Embassy, edited by Sir Harris Nicolas in 1828, and, with the Beckington portion of the letters of Margaret of Anjou (published by the Camden Society), ought to furnish materials for arriving at a pretty accurate idea of a remarkable man in a remarkable age.

M. ROGEARD, author of "Propos de Labienus," who sought refuge at Brussels after his flight from France in consequence of the seizure of that attack upon the Emperor of the French, has just been expelled from Belgium for having written a Red Republican satire, entitled "Pauvre France," which the Belgian authorities considered "insulting both to the Government which sheltered him and to a neighbouring friendly nation." In the preface M. Rogeard attacks monarchies in

* "Principles of Political Economy." By John Stuart Mill. People's Edition.—"On Representative Government." By John Stuart Mill. People's Edition.—"On Liberty." By John Stuart Mill. People's Edition. (Longman, Green, & Co.)

general, though France more particularly, as being upheld by "the seven scourges of modern society—a standing army, a paid clergy, irremovable magistrates, centralized administration, police, prostitution, and organized pauperism." M. Rogeard withstood the order of expulsion, and was removed by force on Sunday morning across the border into Germany.

ABOUT fifty miles from Tuxan, in the province of Tlaxcala, in Jicorumbo, a dense forest of gigantic cedars, situated on a healthy table-land, the ruins of an extensive Mexican aboriginal city, have just been discovered. The temples are of immense size, some with vaulted roofs, and so well preserved that ancient paintings appear fresh, and the courts are filled with figures of idols, and pyramids surmounted by the same.

THE University of Athens would seem to be in flourishing condition. From the official report, just published, there appear to be 46 professors in the University, 4 of whom are in the theological department, 13 in that of law, 22 in that of medicine, and 25 in that of philosophy. The number of students is 1,080, 852 of whom are natives, and the rest subjects of Turkey, of whom 600 were studying law, 216 medicine, 153 philosophy, and 38 theology.

WE may fairly surmise that one of the October Quarterlies will contain some notice of the life and labours of so eminent a man as Walter Savage Landor was. The attention of the biographer, whoever he may be, should be directed to a brief correspondence Landor had with Dr. Parr. It is characterized by the usual amount of mutual admiration with which learned men not at war indulge each other. In one "eloquent letter," Landor complains of the virulence with which he has been attacked by the Antijacobin; but thanks God that he has a mind more alive to kindness than to contumely. "The statue of Memnon," he continues, "is insensible to the sands that blow against it, but answers in a tender tone to the first touches of the sun." This is a pretty illustration of the proverb, "Persuasion is better than force," if not so true a one as Æsop's fable of "The traveller and his cloak."

A VERY important work, in a military point of view, is in the course of publication at Berlin "The War in Denmark in the Year 1864, by Count Waldersee," of which five numbers have already appeared, with plans of the battles and sieges on a scale of 1:100,000.

M. BERRYER is at Angerville, according to the *Union de l'Ouest*, engaged in collecting and going carefully over all his speeches, made either at the bar or in the Chambers, which have historic interest, appending to each a note explanatory of the circumstances of the trial or debate. The chief interest will consist in M. Berryer's personal recollections of his clients, beginning with Marshal Ney, whose cause he so eloquently pleaded, and terminating with the late Montmorency affair.

THE Modena correspondent of the *Opinione*, of Florence, states that the Count George Ferrani-Moreni, to whom the Italian Government has confided the arrangement of the great mass of account books which formerly belonged to the family of Este, has brought to light a MS. on vellum of nineteen pages, entirely in the autograph of Ariosto. It is simply an account of moneys received and disbursed by him to the Balestieri, troops placed under his orders as commandant of the province. It commences with the year 1522, and ends with the 15th of May, 1525, the period in which the poet held that office.

THE Parisian theatres are at present in active operation. At the Français Piron's great play, "La Métromaine," has been revived, Delaunay achieving a great success as *M. de l'Empirée*. At the Vaudeville Charles Mathews has been received with immense delight in Arnal's great rôle of *Sir Charles Cold Cream* (not Coldstream), in "L'Homme Blasé" (Used up). The much-abused drama of M. de Girardin, "Les Deux Sœurs," is also played the same evening. "Le Déluge Universel," "Le Paradis Perdu," and the "Biche au Bois," still occupy respectively the stages of the Châtelet, the Gaîté, and the Porte St. Martin. At the Variétés a new three-act comedy by a leash of authors has been produced. It is entitled "Le Meurtier de Theodore." Novelties are also played at the Gymnase, the Palais Royal, and the Folies Marigny, as well as other of the less celebrated theatres. The Odeon and the Bouffes are the only houses devoted to dramatic performances not open.

AMONGST recent French books we notice the first volume of J. Barni, "Histoire des Idées

Morales et Politiques en France au 18. Siècle;" the first part of the Abbé Bloeme's "Lettres sur la Littérature Flamande;" Prince P. Napoleon Bonaparte's "Loisirs, Recueil de Poésies en Français et en Italien;" Count Cibrario's "Conditions Economiques de l'Italie au Temps de Dante;" the third volume of Feuillet de Conches' Louis XVI., Marie-Antoinette, et Madame Elisabeth, "Lettres et Documents Inédits;" "Un Mois dans le Sahara," par J. Labbe; Pataille's "Appendice au Code International de la Propriété industr., artist. et littér., Contenant les Traités Internationaux et les Lois Franc. et Etrang. depuis 1855, jusqu'à ce jour, avec des Précis et des Notes;" and Taine's "Philosophie de l'Art: Leçons Professées à l'Ecole des Beaux-Arts."

THE public may at length hope to see Mr. Frith's Derby Day on the walls of the National Gallery, should the voyage of the steam-ship London, advertised to leave Melbourne on the 4th instant, prove successful. Mr. Gambart's agent, in charge of the picture, had secured a passage home by this vessel, when last heard of.

M. BELMONTET, the poet-deputy, is preparing an "historical comedy," in which the principal character is Cardinal Richelieu.

PROFESSOR GAMGEE'S work, "The Great Cattle Plague," will be divided into three sections: the first will give the definitions, symptoms, post-mortem appearances and nature, remedial treatment, prevention, and legislation; the second, the past history and ravages abroad, the present history and ravages at home; and the third, the official report of the International Congress held at Vienna in 1863. It will be published by Mr. Hardwicke.

MR. BENTLEY will publish "Harem Life in Egypt and Constantinople, by Emmeline Lott, formerly Governess to the Grand Pacha Ibrahim of Egypt," in two vols., and "History of the Discoveries of the Circulation of the Blood, of the Ganglia, and Nerves, and of the Action of the Heart, by Robert Lee," with plates.

MESSRS. SMITH, ELDER, AND CO., issue a cheap illustrated edition of "Romola," by "George Eliot;" and a shilling edition of Miss Craik's "Winifred's Wooing;"—MR. BENTLEY, a new edition in a single volume of Lady Fullerton's "Lady-Bird;"—MESSRS. TINSLEY, a similar edition of Mr. T. G. Trafford's "George Geith of Fen Court;"—MESSRS. MAXWELL AND CO., having the stereotype plates of Miss Amelia B. Edwards's "Hand and Glove," have reprinted the work on large paper, with two illustrations;—and MESSRS. CHAPMAN AND HALL give Mr. Clarke's "Charlie Thornhill; or, the Dunce of the Family," and "The House of Elmore," by the author of "Grandmother's Money," as the new volumes of their excellent two-shilling series of the "Select Library of Fiction."

MESSRS TINSLEY BROTHERS have in the press "Rhoda Fleming," a novel, in three vols., by George Meredith; "Maxwell Drewitt," a novel, in three vols., by T. G. Trafford; "A Trip to Barbary, by a Roundabout Route," by George Augustus Sala; and "Running the Gauntlet," a novel, in three vols., by Edmund Yates.

MR. STRAHAN will shortly publish "The Tragedies of Sophocles," a new translation, with a Biographical Essay, by E. H. Plumptre, two vols.; "Citoyenne Jacqueline, a Woman's Lot in the Great French Revolution," by Sarah Tytler; "Man and the Gospel," by Thomas Guthrie, D.D.; "Miscellanies, from the Collected Writings of Edward Irving," one vol.; and "Six Months among the Charities of Europe," by John de Liefde, two vols., with illustrations.

MESSRS. SAUNDERS, OTLEY, & Co. will publish immediately Mr. Sutherland Edwards' new book on the Polish Insurrection. It will be remembered that Mr. Edwards was the *Times* special correspondent in Poland.

THE prizes for original poems at Christ's Hospital, to be recited on St. Matthew's Day, have both been adjudged to Mr. J. E. Farnell, the first Grecian. The subject for the Latin is, "Bella per Hesperios plusquam civilia campo," and for the English, "Mexico."

IN April last the *Gazzetta del Popolo*, of Florence, suggested that the municipality of that city should place, as it had already done in honour of Mrs. Elizabeth Barrett Browning, a memorial inscription on the walls of the house in which Mrs. Theodosia Trollope died. In adopting this suggestion, the municipality of Florence have unanimously decided that a monumental marble tablet shall be affixed to the

outer wall of that house, at the corner of the Piazza della Indipendenza (now in the occupation of the Portuguese Ambassador).

THE *Morgenblatt für gebildete Leser*, No. 37, continues its Transatlantic Gossip; and gives a paper on Goethe and J. H. Voss;—the *Blätter für Literarische Unterhaltung*, No. 36, has Lessingiana, and a first paper on the History of the Drama;—the *Magazin für die Literatur des Auslandes*, No. 37, a paper upon the English estimate of Hegel's Philosophy;—the *Gartenlaube*, No. 37, concludes Die Judengasse in Frankfurt und die Familie Rothschild; and has a paper by G. Rasch on Louis Blanc: Der erste Arbeiter Frankreichs;—the *Serapeum*, No. 14, John F. Mayer as Collector and Lover of Books, &c.; and a paper by Reigebauer on the Imperial Library of the Louvre;—and the *Ausland*, No. 36, Glaisher on the Present State of Knowledge of the Atmosphere; and another on the Tropical Regions of the Nile.

To perpetuate the memory of the meeting of the English and French Fleets at Spithead, the Lords of the Admiralty employed Mr. Vernon Heath to take a series of photographs on that occasion. The plates have been highly approved by Admiral Sir M. Seymour and their Lordships, and the latter have distributed copies of them in France to our recent visitors, and to our own naval officers at home.

THE "Hummums," in Covent Garden—so well known as the resort of literary and political celebrities of past generations, where Hogarth's "Parson Ford" died, and an account of whose ghost appearing to one of the waiters and delivering him a message to be conveyed to some women of Ford's acquaintance, is given by Boswell in Dr. Johnson's words, as a kind of accredited ghost story—is doomed to destruction. The lease, it appears, has expired, and the Duke of Bedford will not renew it, as he thinks it will be better to extend Covent Garden Market, in consequence of the rapid increase of its trade.

GERVINUS'S second part of the seventh volume of his "Geschichte des 19ten Jahrhunderts" is particularly interesting to English readers, from his masterly sketches of O'Connell and Sir Robert Peel, and his curious dissection of the visit of George IV. to Ireland.

IN a few days the Clarendon Press will issue "Two of the Saxon Chronicles, Parallel, with Supplementary Extracts from the others, edited, with Introduction, Notes, and a Glossarial Index, by John Earle, sometime Fellow and Tutor of Oriel College, and Professor of Anglo-Saxon, Rector of Swanswick." The work will be published by Messrs. Macmillan and Co.

ECCLESIOLOGY will probably put in a claim for admission into the British Association soon, as a separate section. In the forthcoming Church Congress at Norwich there will be an exhibition of articles, both ancient and modern, of general church interest, such as copes, chasubles, dalmatics, tunics, altar cloths, banners, architectural designs, chalices, patens, censers, paintings, engravings, and church furniture generally; and when the real things cannot be sent by exhibitors, models or photographs will be exhibited.

ASCENT OF THE AIGUILLE VERTE.*

Until a few years ago, the chain of Mont Blanc was represented on maps in the good old backbone manner, straight and symmetrical, Mont Blanc in the middle, and the Aiguilles dying regularly away on either side, presenting the appearance, when elaborately executed, of one of those long furry caterpillars, with several smaller ones crawling over its back. It is true that of late years several gentlemen have endeavoured to improve upon this, but their efforts were made without system, and it was found impossible, out of the materials collected, to make anything more than a very unsatisfactory map; but by a systematic exploration of the entire chain, Mr. Reilly has, alone and unaided, produced a correct map. One sees in a moment how extremely unlike the chain is to a backbone, and also that it is neither straight nor symmetrical. There is a main ridge, extending from the Chardonnet to the Trelatête; but from this several others spring, scarcely less important than the main ridge itself. Of these the highest is that which culminates in the Aiguille Verte, and it needs no argument to show how useful it would have been for Mr. Reilly to have ascended that peak, for not only does it command the great

* Mr. Whympster read the following paper, in Section G of the British Association, "On some New Expeditions in the Chain of Mont Blanc, including the Ascent of the Aiguille Verte."

basin of the Glac du Géant, and E. and N.E. slopes of Mont Blanc, but also the basins of the glaciers of Lechaud, Talèfre, and Argentièr, which form, in fact, nearly one quarter of the entire chain. Accordingly, Mr. Reilly resolved to attempt its ascent in the summer of 1863. He was unfortunately repulsed, but still believing in its practicability, agreed to try it with myself in the following year. We met at Chamounix at the beginning of July, 1864, but as the Aiguille Verte was likely to prove an arduous affair, we resolved, before trying it, to make some smaller expeditions, which were necessary to complete the details of the map. These were the ascents of the Aig. d'Argentièr, the culminating point of all the ridges at the W. end of the chain; the Mont Dolent and the Aig. de Trelatète—the latter being a most important point, as it commanded the whole W. face of Mont Blanc, which was at that time entirely unknown, and even on Mr. Reilly's first draft a perfect blank. We set out on the 5th, with the guides, François Couttet and Michel Croz, to attack the Argentièr, but failed to gain the summit on that occasion. We went down to the Montanvert, and started the next morning to go over to the Mont Dolent. As the routes then existing were extremely circuitous, and Reilly wished to complete the delineation of the glaciers of Talèfre and Triolet, we resolved to cross the ridge which separates them by a col—which had been suspected to exist by Professor Forbes, but which had never been traversed—close under the Aig. de Triolet. This we did, and found it a rather troublesome proceeding, although shorter than any pass then known. On the following day we made the ascent of Mont Dolent. This is the sharpest summit of the entire range, but is easy of access; and was, on account of its position at the juncture of three ridges, a most valuable station. Apart from this, it would repay anyone to make the ascent, for the view is of a most superb character. Mont Blanc, still 3,000 feet above the spectator, is seen towering aloft between the Grandes Jorasses and the Aig. de Triolet, and it has over other views, as Mr. Reilly well expresses it, "all the superiority of a picture grouped by the hand of a master." We then went down to Cormayeur, but, fearful that our limbs would stiffen, tore ourselves away from the seduction of Italian society, and camped on the following night in a bundle of straw, on the moraine of the Miage glacier.

The following day we lost by bad weather, and camped on the snows of Mont Sue, ascending the Aig. de Trelatète the day after. The moraine of the Miage is, as you know, one of the wonders of the world. It blocks up the whole width of the Allée Blanche, is nearly two miles in length, and several hundred feet high. It has given rise to considerable speculation, as it is out of all proportion to the glacier which it terminates. But when we stood on the Trelatète the mystery was explained, for we saw rolling down in frozen waves, completely from the summit of Mont Blanc to the Miage, three mighty glaciers, separated by rocky buttresses, from the sides of which boulders are continually brought down to swell the accumulation below. It was a spectacle of wonderful grandeur, for the sheer fall was not less than 7,000 feet. Having now completed the work which we had set ourselves on the southern side, we recrossed the chain by the cols of Mont Tondou and Voza to Chamounix. I had only two days left at my disposal, and as we thought it was on the whole more useful to complete the ascent of the Argentièr than to try the Aig. Verte, we set out once more, and this time succeeded, passing the cavern which had stopped us on the first attempt, by going more to the left.

I now pass to the expedition of the present year, which these preliminary remarks will render more intelligible. For several years past I had remarked the extreme paucity of practicable passes over the main chain. Besides the Col du Géant, the main chain has been traversed at eight points—viz., the Trelatète, the Miage, the Dome, Brenva, Triolet, Argentièr, Tour Noir, and Chardonnet. All of these passes are over 11,000, some over 12,000 feet high, and to all of them there are objections for the object I have named. In the case of the last three, it is necessary to ascend the Val Ferret, and cross the col of the same name afterwards. The Triolet takes too long under any circumstances, and at times might be altogether impossible, and the same may be said of the other four, with the additional disadvantage, in the cases of the Miage and Trelatète, that it is necessary also to cross the Col de Voza. I paid particular attention in the summer of 1864 to that part of the chain which lies between

the Mont Dolent and the M. Maudit, and I came to the conclusion that, although many points might be crossed, there were only three at which reasonable passes might be made, and only one which could compete with the Col du Géant; but as it is always impossible to know to a certainty without an attempt, I resolved to try all three. The ridge, I may say in passing, is nowhere less than 11,000 feet above the level of the sea. The first of these gaps is at the head of the Glac. de Lechaud, and close under a point known as the Dome des Jorasses. On the Lechaud side there was, when I saw it, no difficulty. The summit of the pass was indeed attained by Mr. Wills at the close of the year. He, however, failed to find a way down; so in the first instance I directed my steps to Cormayeur, to see if we could not find a way up; and in order to examine it better than was possible from the valley, went up the Mont Saxe, which was immediately opposite. From this point it was clear there would be two great difficulties, the first completely at the commencement, in getting on to the Glac. des Jorasses. This glac., like all of those which descend on the south side, is diminishing rapidly, and in few places can one meet with more beautiful examples of "roches moutonnées." The glac falls over precipitous slopes; there is not any terminal moraine at its base, as the *débris* when brought down falls over the cliffs and accumulates below. The flutings are, therefore, clearly apparent, and in many instances can be traced right up underneath the glacier. The way over the glacier itself was very straightforward, but the rocks above appeared altogether repulsive.

On the following morning we, that is the guides, Michel Croz, Christian Almer, Franz Biener, and myself, started at half-past one, reached the village of Neiron, then turned to the left, through a forest, and before day-break arrived at the foot of the roches moutonnées of which I have spoken. After a few minutes' halt, we wormed ourselves up the flutings by means of transverse fractures, mounted a long medial moraine, and then the glacier, arriving on a plateau beneath the intended col at eight o'clock. A very few minutes' inspection showed that it was of a too break-neck character to be useful, and I abandoned the idea, turned aside for the Grandes Jorasses, on the summit of which I arrived at one o'clock; I say the summit, but more correctly I should say the western summit, for there are three. The second, more easterly was separated from us by a deep nick. The third was a continuation of the second, running out in the direction of the Val Ferret. I found the Jorasses, like all other mountains which I have ascended of any height, a heap of disintegrated rock, piled loosely up. The ascent of the Jorasses was unfortunately a useless one. Clouds had arisen, which obscured a large part of the view, and completely concealed the Aiguille Verte, which I had hoped to see. We remained an hour on the top, and as there was no prospect of a change, we then commenced the descent. After quitting the arête that descends in the direction of Cormayeur, it was necessary to traverse a steeply-inclined slope of new snow which was lying over ice. We were sweeping round its head in a great curve, intending to zig-zag back to break the descent, talking of glissading, but hardly liking to do it on account of the angle; but before we had half crossed it the snow broke away under the leading men. Had we not had confidence in each other we should immediately have dashed our axes round, and held on; but, as it was, we went down at a great pace, holding on with the axes just sufficiently to prevent our shooting away at railway speed, but not enough to stop us. When we got low enough we stopped ourselves, and followed the route by which we had ascended, right down to Cormayeur, where we arrived at half-past eight, having had nearly sixteen hours of actual walking. The second point in the main chain at which I hoped to find a pass was at the lowest part of the ridge that separates the glaciers of Argentièr and Mont Dolent. From the side of the latter glacier the point was clearly accessible, for a couloir, or a gully filled with snow, led at a moderate angle right from the glacier to the summit. But on the side of the Argentièr it seemed difficult, as the corresponding couloir was of a most formidable angle, and on account of that, and of its aspect, it was probable that it would be found to be of ice. Wishing to learn all the disadvantages of the pass, I resolved to cross from the easiest and descend the most difficult side, and set out at half-past twelve on the night of the 25th of June, with the guides already named. We got

to the top of the Col Ferret at half-past five, rounded the slopes on its western side, traversed the glacier, and arrived at the foot of the couloir soon after eight. It was important to know if stones fell down thus early in the morning, so we halted for half-an-hour; but the sun had not yet struck the place, and all was quiet. That they did fall later in the day was evident by a great furrow in the middle of the couloir, cut so deeply that it passed right through the two edges of the crevasse at its base completely to the rock below. We followed this natural path to the col, and although a few hours later it would have been a most imprudent proceeding, at this time it was perfectly safe. At the top a great cornice of snow, from which enormous icicles depended, had been formed by the north wind, and we were obliged to climb somewhat higher than the col to avoid it. The view on the north side was not cheering, and it was evident thus early that this col also could not be put in competition with the Géant. The Argentièr glacier—a level plain of snow, scarcely sullied by shadow or streaked by crevasse—lay at our feet, but between us and it there was this mighty wall, more than a thousand feet high, of hard ice. Croz immediately went to work, and was lowered out by the others until we had got to the end of our two hundred feet of rope. He then untied, and the rope was paid out by Almer and myself, as Biener descended; we followed one by one, joined the others below, and the process was recommenced. After about four hours had been spent in this way, we approached sufficiently near the schrund at the bottom to see that there was only one snow bridge across it, and that it was on the opposite side. Croz was nearly tired out, so Almer went to work, and in three hours we got across; it was then necessary to come back to the side we had left, and soon after half-past five, after spending seven hours and a-quarter in the descent of this formidable wall, we got on the level glacier, raced down it, and arrived at Chamounix about ten o'clock.

I was by no means surprised that these two attempts had turned out failures as far as usefulness was concerned, but I was desirous to do something that might be turned to account. Therefore, before quitting Chamounix I resolved to try my hardest to ascend the Aiguille Verte. The superb position occupied by this mountain is doubtless known to many present. It commands the greatest part of the Valley of Chamounix, in addition to the point I have already named, and from the Flégère looks scarcely less important than Mont Blanc itself. Very numerous attempts have been made to ascend it from the N. and W. Two or three have been made on the southern side, or that which is known as the side of the Jardin, but hardly any of these latter can be regarded as serious attempts. In all, certainly not less than fifteen or sixteen separate trials have been made during the last twelve years. We set off, Almer, Biener, and myself. Poor Croz was now engaged by some one else, and remained idle at Chamounix. We pitched our tent on the Couvercle, and then the guides and I went up to the top of the rocks to look at the Aiguille before the sun went down. "What does Herr think?" The Herr made a sketch in his usual manner, and pointed out the route. At half-past three next morning we started, and moved steadily towards the peak, the crisp névé at a pleasant angle affording delightful walking; we approached the base, and the rocks looked, every minute, uglier and uglier. We halted; Almer looked at Herr for his opinion, and he shook his head, at which Almer gave a grunt of satisfaction. We went round to the couloir. There appeared no difficulty in it, but stones might fall through, so we halted a time to see. Nothing came down, so we pushed and crawled over a series of big crevasses at its base, and got to the couloir. It narrowed at the bottom, and came through a sort of funnel; looked icy, moreover, and that meant loss of time. A smaller couloir to its right ran up nearly parallel with it, did not present the same objections, and Almer suggested we should go up it for a time. So we did. The angle was steepish, but the trough was well filled with snow, and vigorous kicks made good footing. In a few minutes the summit, which had been concealed, appeared. "Well, Almer, we shall do it," said I. Almer looked and answered, "O Aiguille Verte, you are dead, you are dead!" In less than a couple of hours we had got up the couloir, crossed into the large one, followed it for some distance, and taken to the rocks on the left. Thus at seven o'clock in the morning, we found ourselves at a height of nearly 13,000 feet. The summit was

now immediately over our heads, and we worked towards it as directly as we could. But the rocks were occasionally bad, and we were continually driven to the left. At a quarter to ten they came to a termination, as the mountain was much less steep, and the snow was able to accumulate sufficiently to cover them entirely. Another half-hour of snow-walking took us on to the little snowy cone which forms the summit.

It is needless, after what I have said, to enlarge upon the view. A peak that is seen from a great number of points in a mountainous district must needs command a fine view, and it is absurd to suppose that the finest views are seen from the highest summit. The panorama from Mont Blanc is notoriously unsatisfactory, and the reason is obvious. When you stand on the top you look down on all the rest of Europe; there is nothing to look up to, all is below; there is no one point for the eye to rest on—the view is panoramic. In the Verte there is not this objection. You see valleys, villages, fields; you see mountains interminable rolling away, lakes resting in their hollows; you hear the tinkling of the sheep-bells, as it rises through the clear mountain air, and the roar of the avalanches as they descend to the valleys. But this is not what fixes itself on the memory. It is that great dome, with its sparkling crest, high above. It is the rolling glaciers which descend the buttresses which support them. It is the brilliant snows, purer and yet purer the further they are removed from this unclean world. And even on the mountain top it was impossible to forget the world, for as we were examining the landscape, distant howlings and moans came up from the direction of the Jardin, which we afterwards found arose from a party of tourists, who endeavoured to frighten us by blowing through a horn, and returned disappointed to Chamounix.

THE MECHANICAL EQUIVALENT OF LIGHT.

PROFESSOR THOMSEN, of Copenhagen, has recently endeavoured to determine the mechanical equivalent of light by measuring the quantity of heat produced by purely luminous radiations. The radiation from various sources was caused to pass through a layer of water 20 centimetres in thickness, which intercepted all the obscure heat, while, practically, it absorbed none of the light.

To convert the relative readings of the galvanometer into calories, or absolute units of heat, the unit being the quantity of heat which would raise one gramme of water 1° C., Mr. Thomsen first observed the deflection produced by the radiation from a glass vessel filled with water, at 50° C.: the deflection was $17^{\circ}8$. The vessel contained 1,350 grammes of water, and parted with $0^{\circ}185$ C., or about 250 calories, per minute; but of the 250 calories 102 only ought to be attributed to radiation, for from Dulong's formula the remainder was used in heating the air around. It was these 102 calories which gave a deflection of $17^{\circ}8$ at 0.8 metre distance; one galvanometric degree, therefore, corresponded to 5.76 calories per minute.

Different sources of light were now placed at the same distance; the total effect of the luminous and obscure radiations was then determined. The radiation from a wax candle, which consumed 8.2 grammes of white wax per hour, gave a deflection of $36^{\circ}5$, which corresponded to 210 calories. The whole heating effect of a similar wax candle was 1,400 calories per minute; this experiment showed, therefore, that only a seventh of the heat developed by combustion was lost by radiation, the remainder being consumed in heating the surrounding air. The following are the results given by four luminous sources placed at a distance of two metres from the pile:—

	Luminous Intensity.	Radiation per minute and per unit of light.
Wax candle ...	1	210 calories
Gas flame ...	1.2	201 "
Ditto ...	7.7	199 "
Moderator lamp ...	8.6	199 "

The flame of a Bunsen's burner was found to radiate 255 units per minute, with a luminous intensity equal to 1.2 when unmixed with the air, but it radiated only 196 calories, with no sensible light, when the air was admitted.* Of this almost exclusively obscure radiation nothing passed through a column of water 20 centimetres in length. Rendered luminous, the same flame produced, under these conditions, a deflection corresponding to 4.3 calories, which, according to Professor Thomsen, represented the effect of

the light of this flame, separated from its obscure heat. The absorption of the light by this column of water raised its temperature 13 hundredths of a centigrade degree. Taking as a unit of light, the flame of a wax candle which consumed 8.2 grammes of white wax per hour, Mr. Thomsen obtained the following results:—

	Luminous Intensity.	Light and heat.	Light alone.
Wax candle	1	210	4.4 calories
Moderator lamp	6.25	—	3.9 "
Ditto	8.6	199	4.1 "
Gas flame	7.7	199	4.2 "
Ditto	1.2	201	3.7 "

It is worthy of notice that Mr. Thomsen makes the light and heat together from the various sources in this table equal to about 200 units, the light alone to 4 units. This gives a mean of only 2 per cent. of light emitted from these sources. Professor Tyndall in a paper "On Luminous and Obscure Radiation" published in the *Phil. Mag.* for November, 1864, by a totally different method, makes the luminous radiation of an oil flame 3 per cent., and of a gas flame 4 per cent. of the entire emission.

To return, Mr. Thomsen found that a wax candle which consumed 8.2 grammes of white wax per hour, emitted light enough to heat 4.1 grammes of water 1° C. every minute. The total radiation was 200 calories, or fifty times greater than the light alone, whilst the whole amount of heat developed by combustion was 350 times greater in a lamp, and 1000 times greater in a gas flame. In one second Mr. Thomsen's arbitrary unit of light gave at its maximum .07 calories—that is to say, it raised the temperature of a gramme of water $0^{\circ}07$ C., its mechanical equivalent was therefore 0.029 kilogrammetre. The light from 35 of these units or wax candles was thus equal to 1 kilogrammetre. Hence Professor Thomsen, summing up his results, expresses the mechanical equivalent of light as follows: The luminous rays emitted each second by a source, the intensity of the light of which is 34.9 times as great as that from a candle burning 8.2 grammes of wax per hour, would be equal to a French unit of work—that is, it would raise 1 kilogramme to the height of 1 metre per second. This he regards as the maximum equivalent of light, which future researches may possibly reduce.

Mr. Thomsen intends to apply this method of experiment to the sun and the electric light. Meanwhile M. l'Abbé Moigno, the editor of *Les Mondes*, draws the following conclusions from the foregoing data: According to Bouguer, the light of the sun is equal to 55,000 wax candles placed at the distance of a metre; it follows that, at an equal distance, it would be equivalent to something like 1,230 septillions of wax candles, and consequently 35 septillions of kilogrammetres. The mechanical work of the solar light is thus represented by 3,500 millions of tons raised 1,000 million kilometres, or, in other words, to the weight of the earth raised to the height of six metres. But the earth only subtends an angle of $17''6$ to the sun; it consequently receives only 455 millionths of the total radiation of that body. This amount of light is equivalent to 16 quadrillions of kilogrammetres, which is equal to 16,000 millions of tons raised 1 kilometre, or to moving the entire earth the distance of 2.7 millionths of a millimetre. This distance is only the two-hundredth of the length of a mean undulation of light.

The quantity of obscure heat being fifty times greater, its mechanical value would consequently raise the earth .000,135 millimetre, or a quarter of the length of an undulation.

The surface of the great terrestrial circle is 127 millions of square metres; upon each square metre, normally exposed, there falls as calorific action an amount of light equivalent to 126 kilogrammetres per second. A layer of water, a metre square and a millimetre in depth, receiving perpendicularly the light of the sun alone for one second, would be heated to $0^{\circ}3^{\circ}$ C., which is equivalent to the raising of a kilogramme to the height of 126 metres—that is, it would lift $2\frac{1}{2}$ lbs. to the height of 410 feet. This, certainly, would not be the case unless the water were perfectly blackened, and thus, by its opacity, would it be able to convert the whole of the light it receives into heat. Moreover, M. l'Abbé Moigno makes these calculations on the supposition that the ratio of luminous to obscure rays is the same in the radiation we receive from the sun as in the sources used by Mr. Thomsen; but may there not be reason to doubt the correctness of this assumption?

SCIENCE.

THE BRITISH ASSOCIATION.

THE fact that upwards of 260 papers were read at this year's meeting is a sufficient reason why we should make our concluding remarks on the meeting itself as short as possible; and yet there are several topics on which, if space permitted, we would willingly enlarge. The recommendations which we chronicled last week—recommendations which will doubtless result in a biological section—are but the visible outcrops of much discussion and thought, which next year will possibly result in further suggestions. There was also a feeling among many fast friends of the Association that if it were possible to increase the number of discussions worthy of a Congress where European science is now year by year better represented, and at the same time to reduce the number of papers—or at all events of papers more fitted for presentation to special societies—a great good would be effected. Possibly, also, it may some day be practicable to publish a bill of scientific fare before the meeting, and thus tempt down many unimaginative ones who now hesitate to take a step in the dark, even though that step should at all events land them among friends and fellow-workers. Thus, for instance, we might have had a field-day with the lake-formation champions, and many other similar topics might be named. There was an interesting discussion on the Atlantic Cable—a subject which we believe really does want discussing—but it was carried on in two different sections; and some of the speakers, at all events, found themselves saying in one section what should be said in another, which lead one to think that some arrangement is desirable by which a complete and single discussion on a subject which trenches on two or more sections might be rendered possible. This remark may again be pointed by a reference to the discussion on gun cotton. Here we had men with different opinions expressing them in different places, and therefore without any possibility of settling the matter.

We have before mentioned the excursions, or at all events some of them. We trust that sundry dark rumours, which, if true, will go farther to prove the great success of them this year than anything we can say, are devoid of foundation. It was rumoured that the Saturday excursions are in future years to be discontinued. That this course is extremely undesirable is shown by the regrets of some of those who were entertainers on the Thursday, that the *strangers* had departed, and that their hospitality was confined to those whom a British Association meeting was not required to bring together. So let us retain the Saturday excursion, and make the most of it, by closing the sections to as great an extent, or even greater, than was done at Birmingham. Surely a geological section could have enjoyed Colebrooke Dale as well as the statisticians. But to return to our chronicling.

The total of the grants this year is 2,135l., the receipts of the meeting more than covering it, the amount received being 2,200l. These grants are as follows:—

Kew Observatory	£600
MATHEMATICS AND PHYSICS.	
Glaisher, Mr.—Lunar Committee	100
Williamson, Professor—Electrical Standards	100
Glaisher, Mr.—Luminous Meteors	50
Sykes, Col.—Balloon Experiments	100
Robinson, Dr.—Sound under water (renewed)	30
Glaisher, Mr.—British Rainfall	50
Airy, Mr.—Reduction of Rümker's Observations	150
CHEMISTRY.	
Fairley, Mr.—Polycyanides of Organic Radicals	20
Matthiessen, Dr.—Cast Iron (renewed)	50
GEOLOGY.	
Lyell, Sir C.—Kent's Hole Investigation	200
Mitchell, Mr.—Alum Bay Fossil Leaf Bed	20
Wright, Dr. E. P.—Kilkenny Coal Field	20
Busk, Professor—Maltese Caverns Explorations	30
Murchison, Sir R.—Palestine Explorations	100

* This fact Professor Tyndall has already noticed.

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Salter, Mr. J. W.—Lingula Flags at St. David's.....	20
Bryce, Mr. J.—Researches on Earthquakes in Scotland.....	25
ZOOLOGY, BOTANY, AND PHYSIOLOGY.	
Wright, Dr. E. P.—Irish Annelida.....	15
Newton, Mr.—Didine Birds of Mascarene Islands.....	50
Jeffreys, Mr.—Hebrides Coast Dredging.....	50
Jeffreys, Mr.—Marine Fauna and Flora (Devon and Cornwall).....	25
Jeffreys, Mr.—Aberdeen and Banffshire Coast Dredging.....	25
Scott, Mr.—Oyster Culture.....	10
Jeffreys, Mr. J. G.—Mersey Dredging.....	5
Gray, Dr. J. E.—Oyster Culture.....	25
Lubbock, Sir J., Bart.—Typical Crania (renewed).....	50
Norris, Dr. Richard.—Observations on Rigor Mortis.....	10
Richardson, Dr. B. W.—Amyl Compounds.....	25
Davis, Dr. Barnard.—British Crania.....	50
STATISTICS AND ECONOMIC SCIENCE.	
Bowring, Sir J.—Metrical Committee.....	50
MECHANICS.	
Webster, Mr. T.—Patent Law (renewed)...	30
Russell, Mr. Scott.—Resistance of Water to floating bodies.....	50

£2,135

The addresses and papers, which will be printed in the Transactions of the Society, are as follows: The address of the President, the addresses of the Presidents of the various sections, and the papers read by Mr. Follett Osler, "On the Horary and Diurnal Variations in the Direction and Motion of the Air," and by Mr. Bessemer, "On the Manufacture of Cast Steel." It was also resolved that a committee should be appointed for the purpose of representing to Government the advantages that would be derived from the exploration of the unknown regions around the North Pole.

The number of tickets issued at the present meeting: Old life members, 290; new life members, 44; old annual members, 216; new annual members, 148; associates, 767; ladies' tickets, 508; and 23 foreigners, making the total number of members 1,997; and the amount received 2,227l.

Our report would not be complete did we not acknowledge the great courtesy of the officers of the Association, the local secretaries, and, indeed, all who were "officially" connected with the meeting. It was equalled only by the hospitality of those who both in the town and at the different places visited laboured to render the meeting a pleasant as well as a useful one.

J. N. L.

Section A.—MATHEMATICAL AND PHYSICAL SCIENCES.

On the Horary and Diurnal Variations in the Direction and Motion of the Air at Wrottesley, Liverpool, and Birmingham. By Follett Osler, F.R.S.—Anemometrical observations having been taken hourly with considerable accuracy for several years, and those at Wrottesley, Liverpool, and Birmingham having been recorded on exactly the same plan (which was originally commenced by Mr. Hartnup at the Liverpool Observatory, in 1852), I was desirous of tabulating the results from those stations on a plan which I thought might prove of some value in extending our knowledge of the motion of the air in these latitudes, and possibly of developing some further laws bearing on that subject. In the first place, I wished to carry out some investigations distinct from those which I made some years ago, respecting the horary variations, by taking the horizontal motion of the air instead of the force. I have, therefore, arranged and tabulated the records obtained from Dr. Robinson's integrating instrument in conjunction with those of time and direction—these registers being peculiarly suited for accurate tabulation, and for general purposes most useful—the record of the force of the wind being more available in examining storms and sudden changes, and in exhibiting those peculiar features in the currents that frequently occur. Besides these hourly results, I desired to tabulate the daily variations in the atmospheric currents throughout the year, in order to ascertain what knowledge could be obtained from these stations respecting their periodicity and amount. Accordingly, I applied to Lord Wrottesley, who most kindly and handsomely placed the whole of the valuable anemometrical records taken at his

observatory entirely at my disposal; my friend Mr. Hartnup did the same, and furthermore aided me very greatly by allowing his assistants to tabulate in the manner I required a complete series of the observations of the direction and horizontal motion of the air as recorded at the Liverpool Observatory. From both these stations the records are for a period of seven years—namely, from 1858 to 1864, the former being the time when the integrating records at Wrottesley commence. The same period is therefore taken for Liverpool, although they exist to six years earlier date. At Birmingham the registers are only for three and a-half years; they are principally interesting when taken in combination with the other stations. I consider the Wrottesley Observatory to be in a favourable situation for obtaining accurate meteorological observations, being on elevated ground pretty equally open on all sides. As regards the movements of the air, this is of great importance. The Liverpool Observatory, which is close to the river, is not at present so well situated as to position. It is peculiarly exposed to the N.W. and S.E., the course of the river lying in that direction, while it is somewhat screened on the N.E. I say at present, for by next year it will be removed to Bidston Hill, which situation seems to be unexceptionable.

I will commence with the horary observations. These are obtained by extracting from the recorded observations the amount of motion of each wind from sixteen points of the compass for each hour of the day, distinguishing the months of the year. Thus, all the north wind that passed over the station at one o'clock in the morning during the month of January is taken note of and tabulated for the seven years under examination, next at two o'clock, and so on through the twenty-four hours. February is then treated in the same way, and so continued through every hour for the seven years, for each of the sixteen points of the compass.

This may seem to some an almost unnecessary amount of detail, but it was the only safe mode of proceeding, as it was quite possible that a more summary course might fail to detect variations peculiar to certain portions of the year, and thus mislead, in taking out the means, by neutralizing the results.

From observations thus worked out, the curves of each wind are projected.

The next series of observations are tabulated in such a manner as to show the direction and amount of motion of the air every day in the year from a mean of seven years, and referred to sixteen points of the compass. They are tabulated in the following manner: Commencing with the 1st of January, the total number of hours that each current has lasted, and the total number of miles that have passed during the day, is obtained from the diary in which the results of the indications registered by the instruments is recorded. And this is repeated in rotation through every day in the seven years; thus completely sorting, as it were, all the winds. The mean amount of each wind is then taken for each day. From tables thus obtained a diagram was made to a scale, so as to represent the comparative number of miles of air that passed from each point of the compass for every day in the year, the length of the line being in proportion to the length of the current from each point on each particular day. An approximate meteorological division of the year is thus obtained having reference to the currents that pass each station. The next thing was to ascertain whether the results thus exhibited were due to the current of one year or of a number of years; for it was of great importance not to be misled by the extent of a current that was due to one or two years being mistaken for a type of a period of years. To show this, a space is allotted under each day, which is divided into seven parts, representing the seven years; then one of these divisions is marked, to indicate the year in which each wind occurred, the size of the mark having reference to the quantity due to its particular year. By this means the prevalence, or otherwise, of any wind, at any period of the year, is at once rendered conspicuous.

The diagrams explain this mode of illustration. Thus, commencing with the easterly winds, a remarkable cessation is observable towards the end of January and beginning of February, again at the end of June, &c. Indeed, we see that certain sets or groups of wind behave in a peculiar manner, and there is reason to suppose, both from the diagrams of each day, and also from those exhibiting the horary variations, that there are three main currents:—

First, the north-easterly, which is peculiarly strongly marked in its character and period of

occurrence. Whether this is a temporary extension of the trade winds at a time when the most rapid changes are taking place in the sun's declination, it is too early to determine, but I think it not improbable, as it possesses several of the characteristics of that wind. Secondly, the south-westerly current, or anti-trade wind, which presents some distinctive features by its periods of prevalence at certain parts of the year being strongly indicated, and by its peculiar law of horary variation; and the north-westerly current, which is rendered striking by the great difference in the amount of air that passes during the day compared with the night, and its periods of prevalence.

An examination of these observations more than ever convinces me of the necessity of keeping a constant record of the movements of the air over as large an area of the earth's surface as can with convenience be arranged. The geologist, whose researches also extend over the whole earth, finds in the great globe itself a vast registering instrument, where the changes that he is studying have been permanently written, enabling him at his leisure to examine its records, and refer to periods so immeasurably distant, that he may, by reversing his train of thought, have glimpses of eternity. The meteorologist, on the contrary, finds himself lost by the ephemeral nature of the forces and conditions with which he has to deal. He requires all the artificial appliances that can aid him to take note and record the various changes that occur; but of all the conditions he may record, there are none more important, or perhaps so important, as the great currents of the atmosphere. A knowledge of the quarter from whence the air arrives at given points on the earth's surface, and the duration of the current, will be a key to its various conditions of temperature, humidity, weight, and all the other features it may possess; while to trace its onward course over a large area will materially aid in unravelling the secret of the causes that demand it, and the discovery of the laws that determine its course.

Section B.—CHEMICAL SCIENCE.

The address in this section, delivered by Professor W. A. Miller, was of great interest. We reproduce the following abstract:—

Interesting historical associations are naturally awakened in the mind of the chemist as he enters upon the business of this section of our scientific gathering in the town whose hospitalities we are now sharing: for he is reminded that on the 1st of August, 1774, only ninety-one years ago, Priestley laid, at Birmingham, the foundation of modern chemistry, by the discovery of oxygen.

Yet it seems difficult to realize the fact that there must be some still living who entered life when the chemical nature of the atmosphere was undiscovered, when water was believed to be an elementary substance, when the composition of the ordinary acids, nitric, hydrochloric, and acetic, was unknown, when the discoveries of Galvani had not been made, and when the battery which perpetuates the name of Volta did not exist.

It requires a considerable mental effort to estimate aright the extraordinary progress which chemistry, both in its scientific and in its practical aspect, has made since that day.

For example, the development of the laws of combination—the determination of the equivalent proportions of the elementary bodies—the art of chemical analysis—the atomic theory—the isolation of potassium, with the consequent discovery of the compound nature of the alkalis and earths—and the marvellous developments of the organic department of chemistry, exhibit some of the most striking points in the progress of the science; whilst in the chemical arts we may mention gas-lighting—the manufacture of stearic acid and other fatty acids for candles—the industry of petroleum and paraffin—the chemical process of bleaching by chlorine—the preparation of carbonate of soda from common salt, and the extensive alkali trade. The discovery of iodine and bromine, and their varied applications as remedial agents and otherwise—the fascinating processes of photography—the development of the trade in beet-root sugar—the extraction of quinia, morphia, and all the vegetable bases—these and other processes of chemical manufacture too numerous to mention are all subsequent to, and may be said to be in nearly every case consequent on, the great discovery of oxygen.

Well may we sympathize, now, in the sanguine anticipations of Priestley himself, expressed in the preface to the volume in which this dis-

covery is recorded, "Experiments and Observations on Different Kinds of Air," vol. ii. p. vii: "In reality, this is not now a business of air only, as it was at the first; but appears to be of much greater magnitude and extent, so as to diffuse light upon the most general principles of natural knowledge, and especially those about which *chemistry* is particularly conversant. And it will not be now thought very assuming to say, that, by working in a tub of water, or a basin of quicksilver, we may perhaps discover principles of more extensive influence than even that of gravity itself, the discovery of which, in its full extent, contributed so much to immortalize the name of Newton."

But it is not alone with the name of Priestley that we associate the progress of chemistry in Birmingham. Grouped around the father of pneumatic chemistry were several remarkable men who then either resided at Birmingham or frequently met there, including Matthew Boulton, James Keir, Dr. Withering, Dr. Darwin, and foremost of them all, James Watt, who here diversified his engineering labours with his famous investigations into the composition of water. It was at the factory at Soho, too, that Murdoch made the first great experiment on gas-lighting, at the illuminations for the short-lived peace of Amiens; and it was in Birmingham that Dr. Roebuck, in the middle of the last century, erected the first leaden chamber for the making of sulphuric acid, and thereby inaugurated the most important of the chemical manufactures of this country.

Nor has Birmingham failed in more modern times to maintain her reputation in connexion with the chemical arts. Here, twenty-five years ago, Elkington founded the first establishment in this country, for carrying out the processes of electro-plating and electro-gilding. Here Askin made the nickel of commerce, with its companion metal, cobalt, as oxide—articles that might vie in purity with the products of the laboratory. Here Chance has established a manufactory of optical glass, which specially calls for acknowledgment on the part of the student of science; and here Sturge and Albright have erected the only manufactory for red phosphorus which the country contains.

Vast as is the modern development of experimental science, it yet cannot excite much surprise that, with the exception of that portion which falls within the domain of the mathematician, science until recently has been systematically excluded from the general course of education, and has been followed in the majority of instances by those only who commenced its study for professional objects. Yet can we wonder at this, when we remember that the science of chemistry and many entire branches of experimental physics, including voltaic electricity, electro-magnetism, thermo-electricity, the phenomena of polarized light, of photo-chemical action, radiant heat, and others, are, as already stated, less than a century old? But the great strides that they have made in that interval, the social changes that they have introduced, and the additional powers that they have conferred upon man will vindicate their importance as necessary branches of knowledge to be acquired; whilst the more just appreciation of the methods of investigation which they pursue will establish their claim to be regarded as instruments in training the mind, and shaping the intellectual development of the future.

Those whose education was based upon the linguistic system almost exclusively, as was the case both before and after Priestley's time, could not be expected to realize the magnitude and true bearing of the power of science, and its educational value. Now, however, the case is altered; and it is a subject for congratulation to reflecting men, that the introduction of the scientific element into the ordinary course adopted at our public schools is at length attracting serious attention, and that its importance has been insisted on in both Houses of the Legislature. The practical instinct of the nation is becoming alive to the necessity of making certain portions of the training of our youth consist in the systematic study of the elementary parts of properly selected branches of science; and it behoves all who are themselves engaged in the pursuit of science to consider in what way they can themselves aid in forwarding this object.

I need not here advert to the exploded notion, that the acquisition of the truths of science can in anywise endanger those of revelation; for truth is ever consistent. But it may not be superfluous to reassure the minds of some who imagine that science, like a fresh invasion of Vandals, will extinguish scholarship and classical

learning. Language must, indeed, ever form the basis of our system of education; for it is the key that unlocks the stores of knowledge; and no languages are so fitting to form the groundwork as the tongues of ancient Greece and Rome, irrespective of the treasures of philosophy, eloquence, poetry, and history which they contain. They have that intellectual finish and completeness which belongs only partially to science. A moderate amount of classical knowledge can be, as indeed it ought to be, attained by every so-called educated mind, while for him who would carry the critical faculty to a high state of cultivation, the study of the classics affords the means. These tongues constitute the basis of many of the modern European languages; and an acquaintance with their literature imparts a cultivation and a polish that it is almost vain to seek from any other source. Just as some minds seek to attain distinction in the wide domain of philology, other minds, as vigorous, though differently constituted, delight in the study of natural laws and affinities. It would be a hard thing to say that provision should not be made in our schools for the latter, as wide and liberal as it has been for the former.

It is not to be supposed that, because science is to form a part of the education of every gentleman, therefore it will constitute the pursuit of his mature years. What is needed is that he possess sufficient knowledge of its principles to qualify him to appreciate the advances which science is making, and to enable him to contribute intelligently towards its progress.

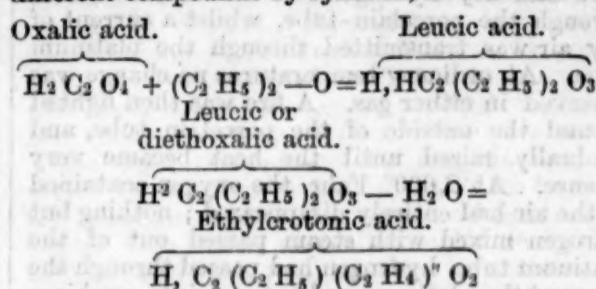
It is certain that if science is to form a useful portion of the education of a boy, it must be undertaken with the determination to deal with it as a matter of study; the same pains must be taken to ascertain that each boy understands the principle, for example, of the air-pump, or the meaning of the thermometric scale, as that he comprehends a rule in syntax or the analysis of a sentence. To do this, however, the instruction given must not be limited to a dry lecture on the principles of some branch of science once a-week. These principles must be logically unfolded, and illustrated, when necessary, by experiments, and the structure of machines and apparatus explained by suitable diagrams; the boys must be taught to take notes of each lecture; and the ground covered must be made secure by following up the lectures with frequent examinations, both oral and written. These are as necessary to the successful study of a science as the writing of exercises, or the practice of construing is to the accurate study of a language. Science is not merely to supply her facts; she is to be employed to develop the powers of the mind, and to discipline them for action. Hence it is of far more importance to instil principles, and to cultivate precision in observation, in thought, and in description, than it is to load the memory with mere facts, however valuable. In short, the system of *cramming* is to be eschewed, whilst the formation of habits of comparing, reasoning, and judging is to be encouraged in every way.

It may at first be difficult to meet with well-trained and competent teachers; but when once the want of instruction in science is proclaimed, the teachers will soon be forthcoming. Some years will, no doubt, elapse ere science is admitted to take equal rank, as a means of education, with the study of classical literature. Still it is but a question of time; and we cannot but hope that our universities, following up the commencement which the youngest but not the least active amongst them, the University of London, has made in the establishment of degrees in science—we cannot but hope, I say, that the heads of our universities will ere long feel it to be their duty, as unquestionably it will be their wisdom, to place themselves at the head of this new movement, which is destined to exercise so wide an influence upon the education of our people.

But it is time that we proceed to take a rapid survey of some of the principal points in the progress of chemistry during the last twelve months. The course of chemical discovery since our meeting last year, though not marked by any very striking novelty, has nevertheless been steadily advancing. Ideas previously thrown out have been discussed and developed; and many of them are leading to new discoveries, or are being applied to explain phenomena before wrapped in obscurity.

During the past year Frankland and Duppa have especially signalized themselves by their researches upon the lactic and the acrylic series. Two years ago, Frankland, commencing with oxalic ether, and acting upon it with zinc ethyl, obtained from it leucic ether by substituting

ethyl for a portion of the oxygen contained in the oxalic ether; and afterwards, conjointly with his friend Duppa, he has generalized this reaction. Still more recently, these chemists have traced the connexion between the lactic and the acrylic or oleic series, by reactions in which the abstraction of the elements of an atom of water from the basylous portion of a member of the lactic group converts it into the corresponding member of the acrylic series. These relations will be readily understood by representing the different compounds by symbols, as follows:—



In these and kindred investigations, the necessity for the introduction of fixed principles of nomenclature for regulating the construction of names for the recently discovered compounds has been sensibly felt; and indeed the changes in notation rendered necessary by the alteration in the values assigned to the atomic weights of many of the chemical elements have rendered a general revision of the system of chemical nomenclature a matter of pressing importance. Probably few subjects could more usefully occupy a portion of the time of this Section during the ensuing week than a thoughtful consideration of the changes which it may be expedient to introduce. The meeting of chemists from various parts of Europe with many from distant parts of our own country affords an excellent opportunity for discussing a subject of this kind, where any conclusions, to be practically effective, must secure the concurrence of a majority of the active cultivators of the science.

Did time permit, it would be easy to mention other investigations in the organic department of chemistry, scarcely less interesting than those already alluded to, such as those on the synthesis of the aromatic acids by Kekulé, who has prepared both benzoic and toluic acid by the graduated action of sodium on an ethereal solution of bromo-benzol, and of bromo-toluol whilst submitted to a current of carbonic anhydride, as, for instance, may be explained by the equation—



$$\text{C}_6 \text{H}_5 \text{Br} + \text{Na}_2 + \text{CO}_2 = \text{Na C}_6 \text{H}_5 (\text{CO}_2) + \text{Na Br,}$$

or such as those of Maxwell Simpson and of Baeyer on the artificial formation of tribasic acids; and, referring to methods of research, stress might be laid on the important aid afforded by the extended use of the amalgam of sodium as a reducing agent, and on the similar but still more remarkable reducing effects of hydriodic acid—processes, indeed, not new, but the value of which till quite recently has only been partially recognized.

Passing allusion only can now be made to some of the processes of mineral and metallurgical chemistry, such as the improvements in the details of the process for preparing magnesium, the comparative facility with which the recently discovered metals, thallium, rubidium, and caesium and their compounds may be obtained, and the application by Redtenbacher of his observation of the sparing solubility of their alums to the extraction of the new alkalies from the lithium residues of commerce. Of indium, too, the latest of the newly-discovered metals revealed by the spectrum, it must suffice to say that it has been obtained in quantity which places its existence as a distinct metal beyond question. I am indebted to my friend Professor Roscoe for the small specimens of the metal and its sulphide now upon the table.

An extensive branch of industry is now springing up in the improved methods of voltaic deposition of the metals. Weil has, by the use of an alkaline solution of tartrate of copper, contrived to coat iron and steel with a tough closely adherent sheathing of copper, by simply suspending the articles to be coated by means of a wire of zinc in the metallic bath. No battery is required. Lead and tin may in a similar manner be deposited on copper, iron, or steel, if the oxide of tin or of lead be dissolved in a bath of strong solution of caustic soda.

I must, before I conclude, advert to one or two interesting additions to our knowledge upon the side where chemistry and physics meet. Few results, perhaps, were more unexpected than those obtained by Deville and Troost upon the permeability to gases of certain dense metals

at elevated temperatures. They have proved that platinum and iron, when white-hot, become for the time porous, and are rapidly permeated by hydrogen, which will even pass out under the pressure of the atmosphere and leave a vacuum almost perfect within the tube. In one form of these experiments, tubes of hammered and of cast platinum (which in one case was as much as a twelfth of an inch in thickness) were fitted by means of corks into the axis of a shorter and wider tube of glazed porcelain; a slow current of pure and dry hydrogen was then maintained through the porcelain tube, whilst a current of dry air was transmitted through the platinum tube. At ordinary temperatures no change was observed in either gas. A fire was then lighted around the outside of the porcelain tube, and gradually raised until the heat became very intense. At 2,000° Fahr. the oxygen contained in the air had entirely disappeared; nothing but nitrogen mixed with steam passed out of the platinum tube, hydrogen had passed through the pores of the platinum and entered into combination with the oxygen of the air within; whilst at still higher temperatures the moist nitrogen became mixed with hydrogen. As the tube cooled, the same phenomena occurred in the inverse order, till, when the ordinary temperature had been regained, no diffusion of hydrogen was perceptible, and unaltered air was collected from the platinum tube. Analogous results were obtained when a tube of soft cast steel was substituted for that of platinum, though the thickness of the steel tube was an eighth, or in some cases as much as a sixth of an inch.

From these experiments one practical conclusion deducible is, that air-pyrometers the bulbs of which are formed of iron or platinum cannot be relied on when employed for measuring elevated temperatures; glazed porcelain, however, was found to confine the gases completely.

Curious as these results are, they are but parenthetical in another series of more general bearing, in which Deville has for some time been engaged—viz., the phenomenon of dissociation, as he has termed the partial decomposition which compound gases experience under the influence of a temperature more or less elevated.

A very striking result was obtained by the use of an apparatus similar to that employed in the experiments just described, but in which a brass or silvered tube was substituted for the platinum or iron tube. A rapid flow of water was maintained through the metallic tube, so that it was kept quite cool, whilst the outer porcelain tube was gradually raised to an intense heat as before. On transmitting a current of pure and dry carbonic oxide through the porcelain tube, the lower part of the surface of the cold metallic tube became covered with deposited carbon, whilst a portion of the carbonic oxide, by combining with the oxygen previously united with this carbon, became converted into carbonic anhydride.

Sulphurous anhydride was by similar treatment resolved into sulphur and sulphuric anhydride; and even hydrochloric acid was partially separated into hydrogen and chlorine. These experiments are intimately connected with the attempts made to explain the cause of certain exceptions to Ampère's law, that equal volumes of gases or vapours contain the same number of molecules of each.

Section C.—GEOLOGY.

The abstract of the address will be given next week.

On The Lower Silurian Rocks of the Isle of Man. By Professor Harkness and Mr. H. Nicholson.—The authors pointed out the imperfect information existing concerning the Old Rocks which form the largest portion of the Isle of Man. These rocks are still seen in the cliffs which bound a large portion of the island, and in the neighbourhood of Douglas they are of a grey colour, dip S.E. at a high angle, and are intersected by a prominent cleavage. N.E. of Douglas, at Bank How, these grey rocks are succeeded by greenish rocks, which rest conformably upon them, and above these greenish rocks porphyries occur. The grey rocks above alluded to with S.E. cliffs occupy the coast from Clay Head to Moun Creek, on the south side of Mangh Old Head. At Moun Creek, the grey rocks are seen on the south side to dip S.E., and on the north side to dip N.W., showing the presence of an anticlinal axis here. From Moun Creek northwards to near Ramsay the N.W. dips prevail, and from Ramsay southwestward the same inclinations obtain to Peel. Along the coast south of Peel the N.W. dips continue to Port Erin, at which the S.E. inclinations again appear, and these prevail wherever the older rocks are seen

along the coast to near Douglas, and at Douglas Head the green rocks as seen at Bank How again present themselves. These green rocks are the equivalents of the lower portion green slates and porphyries of lake country, while the underlying grey rocks are the equivalents of the Skiddaw, their strike connecting them with the Skiddaw slates of the Skiddaw country proper. The Skiddaw slates of the Isle of Man yielded the authors no fossils except the genuine form *Paleochincla*.

On a New Chart of Fossil Crustacea. Compiled by Messrs. J. W. Salter, F.G.S., and Henry Woodward.—This class of organic remains is specially interesting to Silurian geologists, as it is so well represented in the older rocks of the Midland district. Their appearance is as varied as their structure is typical, whilst their distribution and habitats, both recent and fossil, are equally extensive. As we descend to the older rocks, only two Crustacean forms are found; but although in certain rocks Trilobites alone occur, their extreme diversity of form and beauty of sculpture and ornamentation compensate for this. As this group extends, in time we find the ornamented and spinose forms disappear, and only one genus (*Phillipsia*, named after the distinguished President of the Association) survives to the Coal Measures, when the whole group disappears, and its place is filled by other classes, which now obtain their maximum development in the Temperate and Arctic Seas. The next most extraordinary and extinct section is that of which the *Eurypter* is the representative, the largest individuals of which attained a length of six to seven feet. The group *Cirripedia*, represented by "Barnacles" and "Acorn Shells," belong to the Crustacea. Until within a few months ago it was supposed that no member of this division existed lower down than Rhaetic Beds; but the fossil *Chiton Wrightianus* of De Koninck, which has been long known to the Dudley collectors, has recently been proved to belong to the Cirripedia.

The chart exhibits most clearly the distribution and classification of the Crustacea, and has been very carefully engraved by Mr. J. W. Lowry.

On the Lake Country. By Professor Harkness and Mr. H. Nicholson.—The authors described the fossil contents of the Skiddaw slates, the lowest sedimentary rocks in this district, and added to the number of these two forms of Trilobites a Lingula and a Graptolite. Above these Skiddaw slates there occur in the Lake country thick masses of porphyry and green slates, in which hitherto no fossils have been found. The authors pointed out that the discovery of a rich Caradoc fauna in East Westmoreland, in slaty beds, between two thick masses of porphyry, justified the inference that rocks possessing a like fauna occurred among the green slates and porphyries of the Lake country. With this impression, they were induced to examine carefully a band of green slates which underlies the Coniston limestone, and from which these slates are separated by a mass of porphyry. In these slates they detected fossils in Long Steddale, and following this band, they also met with them south-west of Ambleside. These fossils have a distinct Caradoc facies, and represent the Lower Caradoc series, the middle Caradoc being represented by the Coniston limestone, and the Upper Caradoc by the Coniston flags and grits. To the fauna of these Upper Caradoc rocks the authors have been able to add many fossils not hitherto recognized therein.

From their examination of the Lake country the authors have not been able to recognise any strata which can be referred to the Llandoverly group, nor can they see any evidence of the Wenlock series. Professor Sedgwick, some years ago, communicated to the British Association a notice of the existence of two faults which intersect the Furness district in a north-east and south-west direction; and these faults the authors believe extend over the southern portion of the Lake area, and it is to their influence that such an extensive development of the upper Caradoc prevail in this area.

These north-east and south-west faults the authors find also to exist among the Lower Silurians of East Westmoreland. They are of an ancient date, as they do not affect the old red sandstone; for the irregularities of surface which resulted from them have been planed down by denudation before the deposition of the upper old red deposits.

Another series of faults also intersects the rocks of the Lake country, and this is much more recent than the north-east and south-west faults, for they affect the carboniferous series. In the

course of these later faults the principal lakes of the district occur, and these faults have given rise, to a considerable extent, to those fine outlines which are impressed upon the Lake districts.

On an Extensive Distribution of Deposits of White Clay and Sands in North Wales Antecedent to the Boulder Clay Drift. By Mr. George Maw, F.L.S., F.G.S.—In North Wales there is an entire absence of any recognized deposits of an age between that of the Lias and the Boulder Clay, but there exists a series of strata older than the clay, as determined by the evidence of superposition and mineral characters. These deposits may be described as isolated patches of quickly alternating strata of white sands and light-coloured pipe-clays, occupying pockets in the limestone. The strata are either conformable to the concave form of the cavities, or placed almost vertical. There are various localities where these deposits occur, as near Llandudno, Great Orme's Head, at the back of the Conway mountains, in the neighbourhood of Holywell, Mold, &c. These deposits are all unfossiliferous, but closely resemble the Tertiary beds of Dorsetshire. The various isolated patches doubtless once formed a connected deposit, and their preservation is due to the excavation of cavities in the limestone after the deposition of the strata. The series of geological events implied by the foregoing facts would be—firstly, the deposition of the white clay and sand strata any time since the principal erosion of the mountain limestone, which took place probably during the Permian period. Secondly, the partial excavation of the pockets by watery dissolution of the limestone and the gradual lowering into them of the pre-existing deposits. Thirdly, the erosion of the great mass of the formation not protected in the cavities. Fourthly, a continued excavation and deepening of the cavities after the boulder clay period.

On a Deposit, near Lilleshall, Salop, containing Marine Shells. By Mr. C. J. Woodward.—The shells collected are an Arctic group, and consist of common genera of shells, as Turritella, Buccinum, Nassa, &c. The most interesting feature of the paper, however (at any rate, to those who are not conversant with the common facts of geology), was that which related to the elevation of the deposit above sea level. From barometrical observation, Mr. Woodward found the height of the mound containing the deposit to be 463 feet above mean sea-level, and as the shells are many of them such as may be found on the shores of Arctic countries in the present day, the specimens point to a very recent elevation of land.

Mr. J. Gwyn Jeffreys said the shells delivered by Mr. Woodward were Arctic—some of them of species not now found in the British seas. The discovery was interesting, as extending the area of observation with regard to deposits of Arctic shells.

Section D.—ZOOLOGY AND BOTANY.

Dr. Humphry, of Cambridge, read a paper "On the Homologies of the Lower Jaw and the Bones Connecting it with the Skull in Birds, Reptiles, and Fishes." He maintained that the several pieces of the oviparous jaw are represented by the articular and other parts of the mammalian jaw; and that the quadrate and quadrato-jugal bones of ovipara are represented by the glenoid and zygomatic parts of the temporal in mammals. He controverted the views of Cuvier and Owen that the quadrate corresponds with the tympanic bone, and the quadrato-jugal with the squamous; and he also controverted the views of Köstlin and Huxley that the articular bone of the jaw corresponds with the malleus and the quadrate with the incus.

On the Deodar Forests of the Himalaya. By Dr. Cleghorn.—This communication consisted of a report upon the Deodar Forests of the Western Himalaya, which he explored in 1862 and 1863, with a view of obtaining reliable information regarding the timber resources of the Punjab. The reports of Royle, Wallich, and other observers are most valuable as to the Eastern Himalaya, but there were no approximate data on record as to the area of inter-montane forest between the Jumna and Indus. A sketch map was exhibited, indicating the position and extent of the deodar tracts, so far as ascertained between these rivers. He dwelt upon the applicability of the wood of the *Cedrus deodara* for railway purposes in the dry climate of the Punjab, where it has been found to be very valuable. A series of photographs, by Col. C. Hutchinson, R.E., showing the characteristic vegetation of the deodar and other Himalayan trees, were produced, and the average dimensions given. A forest officer is now employed upon each of the great rivers of

the Punjab, for carrying out a systematic plan of conservancy and management of these valuable forests. The quantity of deodar timber annually brought down the various rivers is now very large, and amounted to 12,000 tons upon the Chenab alone. A new and increasing trade in timber upon the Indus and Kabul rivers, important in its commercial and political bearings, was predicted.

The importance of conserving our Indian forests was first discussed at the meetings of the British Association in 1850 and 1851, and since then the subject had attracted great attention, both in England and in India.

Mr. Tristram remarked upon the efforts being made to introduce cedars into Algeria for public purposes. A discussion followed as to the identity of *Cedrus deodara*, *Libani*, and *Atlantica*, in which Dr. Thomson, Colonel Munro, and Dr. Cleghorn took part.

The Zoological Record.—Dr. C. Perceval Wright laid before the section a copy of *The Zoological Record*, edited by Dr. Günther. Up to the present moment the zoologist of these countries was obliged to have recourse to Wiegmann's "Archives" for an account of the very numerous papers which were constantly appearing, and even this was very often published so long after the time, that the records referred to appeared to lose an immensity of their value. Now, thanks to the energetic publisher of this volume, and its able editor, we would have, year by year, our own record of zoological literature, the different portions of which would be compiled by Newton, Dallas, Martens, and others, and which would make its appearance in the early part of each year. He would not take up the time of the section by referring, in any detail, to the advantages that would thus be conferred on zoological science. But he thought the best thanks of the section were due not only to the editor and his *confreres*, but to all who had helped in bringing out this work, more especially to Dr. Francis and to M. Van Voorst, whose names were known all through the world, or, at least, wherever zoology was studied, for what they had done to advance its interests.

Section E.—GEOGRAPHY AND ETHNOLOGY.

On the Discovery of the Albert Nyanza. By Mr. S. W. Baker, communicated by Sir R. Murchison.—This communication consisted of letters which have already appeared in our own and other columns. Mr. Galton felt great satisfaction that Mr. Baker's expedition had confirmed so abundantly the observations and information of Captain Speke. It wholly established Speke's view regarding the Nile, in opposition to that of Miani, and it further confirmed Speke's information concerning the Luta Nziye, or, as it is now called, the Albert Nyanza. Nay, in one respect Captain Speke had advanced our knowledge of that lake even further than Mr. Baker, since the water mentioned by him to the west of Kavagine may yet prove to be united with the lake visited by Mr. Baker.

On the Seychelle Islands. By Colonel L. Pelly.

On the Comoro Islands. By the same.

On the Origin of the Hungarians. By M. D. A. Vámbéry.—The author said the Hungarians belonged to the Altaic race, but there were many subdivisions, which differed essentially; and it was important to know whether the Hungarians were of Finnish or of Turco-Tartar origin. To investigate such a question, there were three means—history, ethnography, and philology. The Greek and Gothic historical monuments relating to the first appearance of the Hungarians in the West were insufficient, and did not help to decide the question, but ethnology did render more assistance. The author then referred to some striking likenesses between the customs of Hungary and Tartary. Their greatest evidence they got from philology. In support of his view, the author quoted the analogy of grammatical forms between the Hungarian and Turco-Tartar languages, and then proceeded to make comparison in the lexicographical character of the languages. He thought both so strictly connected, that it was quite impossible to make the etymology of one without the other. There were many words of the earliest period of social state quite analogous, such as in the words tent, ox, hatchet, butter, cheese. The Hungarians were also connected with the ancient Persian civilization of Central Asia, which was proved by the many Persian words in her language. The ancient religion of the Hungarians and earliest social conditions were borrowed from the Parsee. There were also, he urged, elements of Turco-Tartar origin in the Persian.

On the Ethnology of the Hindu-Chinese Nations. By Colonel Thayer.

Section F.—ECONOMIC SCIENCE AND STATISTICS.

Lord Stanley, the president of this section, in his opening address, discussed the question how far statistical subjects ought to form part of the business of a strictly scientific association, seeing that political economy itself in its present state is rather a collection of practical maxims, supported by reasoning and tested by experience, than a science in the same sense as astronomy or optics are entitled to that name. The topics to which the statistical method is applicable are infinitely various, and have little in common except this one characteristic, that in every case we appeal either to the test of accuracy, to figures, or else to fixed and recognized rules, which are assumed to have the same kind of certainty as prevails in physical science. Meetings like the present answer two purposes, apart from that of social enjoyment. One is the diffusion, not the origination, but the diffusion of ideas. The other is the stimulus given to inquiry by the mere fact of investigations of this kind, or the result of them being brought prominently and conspicuously before the public. It was then shown that, to use figures rightly, assuming that they are accurate in themselves, is not as easy a matter as it is apt to appear. There are various fallacies into which unpractised statisticians fall, one or two of which may be worth noting. One, perhaps the commonest, arises from the use of too narrow a basis for calculation. Another source of error is, that of confounding in one class facts not identical. "Figures do not, indeed, deceive you, but if you put them to a use they are not meant for, they will let you deceive yourself." The uses of the statistical method as applied to national affairs was next dwelt upon. It is the statistical test, employed on a large scale, which alone can be conclusive. It is of the very essence of statistical inquiry that by dealing with masses it eliminates individual peculiarities. We reason back from the mass to the individual; the unit of the statistician, his typical or representative man, is the average man of many thousands. Lord Stanley next pointed out one or two more instances in which figures form a part, and a very important part, of the diary of our national life. The Post-office returns, the Registrar-General's returns, the annual publications and the Customs and Excise departments, our criminal statistics—in all these collectively the social and economical history of the age in which we live may be read. "And note everywhere the absence of mere chance. We speak of chance—it is a word we must use for convenience sake; but we really mean by it, not that the result of the thing discussed is in itself uncertain, but that some or all of the determining causes of such results are to us unknown. We imply, not the absence of a law, but inevitable ignorance on our part of what the law is. When you find uniformity, or something which closely approximates to uniformity, as the number of letters yearly posted without addresses—in the number of widows and widowers who marry—or in the number of detected offences of the same nature committed within the year—it is impossible not to be impressed, however trifling may be the illustration of them, with the permanence and steadiness of the laws which regulate our existence. Now is there any use in knowing that? I think there is. In the first place, no knowledge that bears upon human life is useless, even though we don't at the moment see the practical application to which we can put it. A discovery always turns to account in some way. The most important mechanical inventions owe their origin to purely mathematical theories which the authors of them never dreamt of so applying. In the next place, it is only by observing men in masses, and with the aid of all such helps to accuracy as we can command, that we can fairly appreciate the influence of general causes, whether material or moral, or individuals." The subject of insurance was last referred to.

On the Municipal Expenditure of the Borough of Birmingham. By Mr. Councillor Thomas Avery.—The intention of this paper was to submit a brief history of the municipal expenditure of Birmingham, with a view of comparing the progress of the town in wealth and population with its increase in taxation, expenditure, and the amount of the public debt.

On the Vital Statistics of Birmingham. By Mr. W. L. Sargant.—The author showed the absolute increase and the rate of increase in each decennial period, the density of the population, the death rate, the birth rate, the numbers who died from all diseases. He also, for purposes of comparison, selected Wolverhampton and

Sheffield as hardware towns; Manchester and Leeds as textile towns; Liverpool as a great seaport; London as the metropolis; and Bristol as having many of the characteristics of London. He gave the populations of the different towns in the kingdom in 1752, and showed the great increase that had been made. The highest rate of increase for all England was that between 1811 and 1821. The lowest was between 1851 and 1861. He made frequent references to elaborate tables he had prepared, showing the rates of mortality and the stages at which it varied in males and females. Passing to violent deaths, Bristol stood at the head of the list, Liverpool next, Wolverhampton, Manchester, Birmingham, and Leeds followed; London and Sheffield had the smallest number. There were five towns worse than Birmingham for lung disease, six worse for brain disease, five worse for typhus, six worse for scrofula. As regards all deaths, and towns were worse than Birmingham. Taking all the facts into consideration, he maintained that though the death rate of Birmingham appeared on the register as 27 in 1,000, while that of London appeared as 24 in 1,000, the death-rate of Birmingham was considerably less than that of London.

On the Sinking, by W. G. Heaton; *On the Button Manufacture*, by Mr. J. P. Turner.—These papers formed the first group of the Reports on Local Industries.

On the Division of Labour, by Mr. W. Bridges Adams.

Section G.—MECHANICAL SCIENCE.

An abstract of the address will be given next week.

On Chain-testing Machines. By Sir W. G. Armstrong.—The machines referred to were constructed for the Mersey Harbour Trustees. The most important consideration in the construction of a chain-testing machine was to obtain an accurate indication of the strain upon the chain. The hydraulic press had been the means employed, but the method for determining the amount of strain had been extremely imperfect. Most commonly, the strain had been estimated by the indications on a mitred valve pressed down by a lever and weight. This mode of indication he considered was highly delusive, and he pointed out the advantage of substituting a packed loaded plunger for the loaded valve. The packing should consist of cup leather, so that the friction should vary directly on the pressure. When a chain broke in the test, it was desirable to show not only that it failed to bear the full test strain, but also the amount of strain exerted at the moment of fracture. The pendulum indicator has now been brought into general use. In this the pressure upon the plunger is exhibited by the motion of a pendulum through a graduated arc. When a chain broke, the pendulum fell back until stopped by a ratchet, but left a marker at the exact point on the scale attained by the pendulum. Having spoken of the effect of friction on the results indicated, the writer proceeded to say that in the arrangement of a public chain-testing establishment it was desirable that the apparatus for the various operations should be placed in such succession as would allow the chains to move from process to process without any retrogression. The Birkenhead establishment was then described, in which the machines are adapted to cable lengths of fifteen fathoms, the Board of Trade having recently fixed upon that length as the limit of chain to be tested at one time. He thought the restriction very desirable, and referred to many objections to testing chains in greater lengths.—Some discussion ensued, in which Mr. G. Fawcus, Mr. J. Oldham, and Admiral Sir E. Belcher took part. The former considered that waste water was the best lubricator, and that the longer the lengths of chain the greater would be the vibration. The latter considered that the Board of Trade had taken a step in the right direction in fixing the length at which cables should be tested. He also called attention to the fact that though a cable might be properly tested, still if it were allowed to remain in the water forty-eight hours, and during that time came in contact with the copper bottom of a vessel, its strength would be greatly impaired.

On a New Cotton Gin for Separating the Fibre from the Seed. By Mr. E. A. Cowper.—The new machine acts on the principle of nipping fast hold of the cotton fibre, close up to the seed, and whilst the fibre is so held and protected the seed is pushed away, so as to detach it from the fibre. By this means the fibre cannot be broken, rubbed, or injured in any way, and is detached the full length to which it grew.

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SCIENTIFIC NOTES.

THE 13th number of *Meteorological Papers*, for 1865, consisting of Anemometry at Halifax, has been published.

A NEW test for detecting the presence of cotton fibre in linen tissues has recently been discovered by Professor Boettger. A strip of the suspected fabric is taken, about two inches long by one inch wide, and after having its warp and woof unravelled is plunged into an alcoholic solution of aniline red and fuchsine. The superfluous colouring matter is then removed by repeated rinsing it in water. If, while yet moist, it be placed in a saucer containing ammonia, the colour of the cotton fibres will be found immediately to fade away, while the linen retains a beautiful red tint.

WE referred a short time back to a system of concentrating syrups by the application of cold, the water being frozen, and the sugar left in solution. *The Moniteur*, in an article on the recent increase in the produce of Havannah, states that M. Reynoso, the inventor of the process above referred to, has already succeeded in obtaining, by means of improved methods of cultivation, fifteen thousand kilogrammes of sugar per hectare, instead of the usual yield of three thousand. By treating the syrups according to the freezing process, the per-centage of sugar obtained is nearly doubled.

THE question of the adoption of the French system of weights and measures has recently occupied the attention of a German Commission sitting at Frankfurt. The Commission was composed of deputies from the Governments of Austria, Prussia, Bavaria, Saxony, Hanover, Wurtemberg, Baden, Hesse-Cassel, Hesse Darmstadt, Mecklenburg-Schwerin, Nassau, Oldenburg, and the free towns of Lubeck, Bremen, and Hamburg. It appears, from an article in the *Berlin National Zeitung*, that the Prussian Government is already in possession of an accurate copy of the standard metre and kilogramme preserved in Paris, the legalized unit of weight being in Prussia the pound of half a kilogramme. The remaining German States have signed a convention, agreeing to adopt systems having the metre for a basis, and have requested the Government of Prussia to permit the standards in their possession to serve as such for the whole of Germany. Should no unforeseen difficulties occur, the adoption of a uniform system of weights and measures over a large portion of Europe may be looked upon as a *fait accompli*. A recent report, issued by the late Dr. Kupffer, stated that the metrical system was being gradually introduced in Russia.

SCIENTIFIC CORRESPONDENCE.

GLACIAL SUBMERGENCE.

THE question raised by Mr. Croll, in THE READER of the 2nd inst., appears to me to resolve itself into a suggestion that the relative local gravity of our planet in its northern and southern hemispheres, comparing region with region, and more especially the north with the south polar regions, is not persistent, but variable, an increase in the gravity of the one being accompanied by a diminution in that of its opposite, the variation alternately oscillating from the one hemisphere to the other.

I have no wish to discuss Mr. Croll's theory, which, even if it has been anticipated by M. Adhemar, has nevertheless been reached through an independent line of thought, and therefore has the merit of being original. What I wish is, with your permission, to remind your readers that in reality it supposes the existence of an attraction acting though the earth's polar axis—persistent in its relations to the direction of that axis, but having a secular variation in its quantity.

That such an attraction does exist I think can hardly be doubted when the attention is directed to the subject; but I believe that further inquiry will show that, instead of depending upon local action, whose cause is seated in the earth, it resolves itself into the effects of a form of gravitation acting from without—most probably from an extremely distant source occupying the north celestial pole.

The preponderating mass of land in the northern hemisphere, and the grouping of the continents with their extremities tapering towards the south, appear to point to the action of such a force as the earth was assuming its present relations; while the greater depth of the oceans in the southern than in the northern hemisphere confirms this view, and establishes

the fact that the northern hemisphere is heavier than the southern, or more susceptible of the influence of a gravitating force.

Should it ever be recognized and admitted that the accumulation of the land in the northern hemisphere of the earth is the result of gravitation referable to a source acting from the north celestial pole, it will then be perceived that such a force, however generated, acting upon the earth from without as an attraction, will necessarily exercise a greater attracting influence at the north than at the south pole, seeing that in passing from north to south the earth's axis recedes progressively from its source.

It will also be seen that this attraction has acted, and therefore acts more energetically, upon the land than upon the water, and as a consequence of this, that any variation in its quantity will cause a corresponding variation in the surface relations of the land and the water, or in the level of the water line. But this variation will produce an action the reverse of that indicated under Mr. Croll's theory; for any increase in the force of attraction will make itself felt more on the land than on the water, or tend to elevate the land, the effect of which would be that the water would slowly recede towards the southern hemisphere. In this way, what may be termed a revulsive action as between the land and the water in the line of the polar axis would be introduced; as a consequence of which, a secular revulsive tidal wave would be alternately passing from the one hemisphere to the other.

That revulsion does act in this way can be inferred from the difference in level between the oceanic waters on either side of the Isthmus of Panama; where, although the passage of the ocean currents in the equatorial regions is from east to west, the waters of the Pacific are higher than those of the Atlantic; a fact which, under this aspect, is to be explained by the revulsive principle of equipose—that the greater the oceanic surface area, the longer will be the radius subtended from that surface to the earth's centre—the greater the depth of the water or elevation of the water line. This becomes necessary in order that the actual weight, as contrasted with the volume, of either longitudinal hemisphere, may counterpoise that of its opposite, and the stability of the earth's axis as a spheroid of revolution be thus maintained; the earth becoming then like a top, spinning round its polar axis in space upon its north pole.

The evidence recently published in THE READER, that as a rule the specific gravity of the oceans is greater in the southern than in the northern hemisphere, confirms this theory of revulsion, since under it, again in order to preserve a relatively stable equilibrium, the heaviest waters would tend to recede further to the south, to counterbalance the preponderating weight of the land in the northern hemisphere.

Since time is an important element in geological theories, and the motions of the heavenly bodies are the universal measures of time, scientific geologists require a principle—a cosmical principle—through which to connect the oscillations in the earth's surface level with the great astronomical revolutions.

Such a principle is to be found in the recognition of a polar attraction; indeed, could it be shown that the solar system in its passage through space alternately drew nearer to and then receded again from the north celestial pole, and that the oscillations in the water line of the earth were associated with some great cosmical revolution whose measure was, say, the precession of the terrestrial equinoxes, it would then soon be established that a variable attraction in the line of the earth's polar axis was its source; the variation being produced either by the earth's being carried nearer to the attracting influence, and then borne away from it again, or else by the seat of that influence alternately approaching and receding from the earth.

If such an attraction is in operation, its most easily recognized associated effect would be found in the cosmical revulsive tidal wave that would pass alternately from one hemisphere to the other in the manner I have indicated; the water receding the furthest from, or the land attaining its greatest elevation in, the north polar regions when the earth had reached its point of greatest proximity to the north celestial pole.

Possibly the gradual diminution in the force of the attraction on the line of the polar axis in passing to the south would associate with this secular tide a variation in the earth's equatorial and polar diameters, the one contracting as the other became elongated; the maximum in the elongation of the polar axis being also reached at the earth's point of greatest proximity to the north celestial pole.

All of these changes, if, as I believe, they are really alternately taking place, would, of course, be secular in character, and therefore very gradual in their effects—minute in their determinable quantities, even from century to century; but the whole question is so important, that the opening of the columns of THE READER to its discussion by the publication of Mr. Croll's paper has encouraged me to ask you to make room for this communication.—I am, Sir, yours &c.,

HENRY PRATT, M.D.

EPHEMERIS OF BIELA'S COMET, SEPT., 1865.

Mr. Bishop's Observatory,
Twickenham, September 8.

HAVING lately remarked that the ephemeris of the periodical Comet of Biela, calculated by Dr. Michez, of Padua, and published by Professor Santini in No. 1,507 of the *Astronomische Nachrichten*, does not respond to the elements which are prefixed, and that the run of the differences rather indicated that the ephemeris and not the orbit is in fault, I have calculated the following positions directly from the elements as printed, deriving the comet's heliocentric equatorial co-ordinates from the expressions subjoined, in which E represents the Excentric Anomaly:—

$$\begin{aligned} x &= [0.38975]. \sin (E + 207\ 46.0) + 0.85892 \\ y &= [0.51991]. \sin (E + 100\ 20.3) - 2.44763 \\ z &= [0.02594]. \sin (E + 127\ 52.9) - 0.62968 \end{aligned}$$

The dates of the ephemeris include the period when absence of moonlight may allow of the detection of the comet. The calculations of Dr. Michez apply to the following nucleus, or comet of 1852, assumed to be identical with the brighter one of 1846. It will be desirable to sweep for some little distance from the computed place; the sweeping line will be not very far from the parallel of North Polar Distance.

J. R. HIND.

Ephemeris of Biela's Comet, at Greenwich Mean Midnight.

	Right Ascension.	North Polar Distance.	Log. distance from the Earth.
1866.	h. m. s.	°	
Sept. 8 ...	0 13 47	66 4.9	0.0653
9 ...	0 12 54	66 2.8	0.0599
10 ...	0 11 59	66 1.0	0.0545
11 ...	0 11 2	65 59.5	0.0491
12 ...	0 10 3	65 58.3	0.0437
13 ...	0 9 1	65 57.5	0.0384
14 ...	0 7 57	65 57.1	0.0331
15 ...	0 6 51	65 57.1	0.0277
16 ...	0 5 43	65 57.6	0.0224
17 ...	0 4 33	65 58.6	0.0171
18 ...	0 3 20	66 0.0	0.0119
19 ...	0 2 6	66 1.8	0.0067
20 ...	0 0 49	66 4.1	0.0016
21 ...	23 59 30	66 6.8	9.9964
22 ...	23 58 10	66 10.0	9.9913
23 ...	23 56 48	66 13.6	9.9862
24 ...	23 55 25	66 17.7	9.9812
25 ...	23 54 0	66 22.4	9.9762
26 ...	23 52 33	66 27.6	9.9713
27 ...	23 51 4	66 33.4	9.9664
28 ...	23 49 34	66 39.6	9.9616

ANTOZONE.

ANTOZONE is believed by many scientific men to be quite as much an entity as it was before Mr. Roscoe shot his last *canard*. If this illustrious *savant*, after having edged himself into close proximity to the great Schönbein, had taken the trouble, on his return home, to correct the flying misapprehension (if, indeed, it eventually prove to be one) which was credited by thousands of Englishmen, he would have had the consolation of having once, at all events, rendered some service to science.

It is all very well to say that Schönbein was "much amused," but why did not Mr. Roscoe take the pains to give the rumour at once a flat and authoritative contradiction?

If Schönbein disavow the merit of the discovery, we have as yet no conclusive evidence that Meissner has not succeeded.

R. H. ALLMATT.

PROCEEDINGS OF FOREIGN ACADEMIES.

PARIS.

ACADEMY OF SCIENCES.—Sept. 4.—A note was presented by M. Faye, supplementing his memoir read at the beginning of the year, "On the Physical Constitution of the Sun." The opinion of M. Faye is, that a constant interchange

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is taking place of the matter between the central mass of the sun and the photosphere, this change being due to ascending and descending currents. It is said that the variation in brilliancy, and the occasional disappearance of the so-called rice-grains on the large solar spots, as has been observed through Sir J. Herschel's and Mr. Dawe's special apparatus, is in accordance with this theory. M. Faye further remarks upon a superficial rotation of the sun upon its axis, which varies periodically, and should similarly affect the spots. This variation is proved by a comparison of the observations upon the rotation of the sun made by M. Carrington from 1854 to 1861, and those made by M. Spörer from 1860 to 1863. These observations, taken at different times, and from the 4th to the 25th degree of the sun's latitude, indicate that the velocity of rotation of successive zones of the photosphere may vary with the time. M. Faye justly regrets that photography has only so lately been made the means of continued observations on the sun, this tardiness depriving us of the exact history of the solar changes which it would have given us, had it been applied to this purpose from the commencement of the art.

A note, accompanied with photographs, was presented by M. Vibraye, upon the remains of engravings on ivory, &c., that have been found chiefly in the caverns of Perigord. M. Vibraye has in his possession part of the horn of a reindeer, on which a head, evidently from its tusks and proboscis intended to be that of an elephant, is roughly engraved. The remainder of the horn, most probably having upon it the body of the elephant, is broken away. Comparing it with the species at present in existence, it bears a greater similarity to the Asiatic than the African elephant. M. Vibraye remarks that the supposed sketch of a mammoth on a tooth, which was recently described by M. Lartet, is so minute, that it would have been impossible for any aborigines to have executed it without the actual presence of the animal. This fact, he believes, removes all doubt as to the coexistence of man with the mammoth; and it may show the prolonged existence of the Siberian elephant to the Upper Diluvium epoch.—A memoir was presented by M. Béchamp "On the Cause of the Ripening of Wines." The author affirms, contrary to the results of M. Pasteur, that the sole cause of the improvement of wines by age, is a fermentation, promoted by the presence of organic bodies. Not a single exception to this was found in the different wines examined by him. Upon this he remarks that the whole secret of maturing wine lies in preventing acidity, and in encouraging the production of these organisms.

A paper was read by M. Eug. Fournier "On the Character of the Fruit of the Crucifers."—M. Mouline communicated some observations relative to the disease of the silkworm, remarking especially that a fixed temperature of 25° C. is necessary for the healthy reproduction of the insect.—M. Carret communicated a second note upon the new species of epidemic in Savoy, which, he believes, is entirely caused by the use of cast-iron stoves.—M. Allégret contributed a second memoir "On the Precession of the Equinoxes, and the Duration of the Tropical Year." No abstract of this paper is given in the *Comptes Rendus*.

M. Fouqué sent a fifth letter upon the last eruption of Etna. The three kinds of gases disengaged by that eruption have been analyzed and carefully studied by him. From his examination he divides them into three classes; the first are those containing one or more combustible elements (hydrogen and hydro-carbons); the second those almost exclusively formed of carbonic acid; and the third are those gases which are rich in nitrogen. The full results of analyses of gases belonging to each of these kinds are given in this paper.—A note was sent by M. Jeannet, giving the result of his researches "On Supersaturated Saline Solutions." The author states that the crystallization of such solutions is not caused by the contact of saline particles floating in the atmosphere, for he remarks the presence of ammonia and other bodies in the air preclude the existence of those salts. This statement, it may be remembered, is in direct opposition to the results of the experiments made by another French investigator, M. Gernez, whose researches on this subject we have noticed from time to time. M. Jeannet suggests, but gives no experiments on the matter, that when a supersaturated solution, say of sulphate of soda, is exposed to the air, it should, if M. Gernez be correct, crystallize in a shorter time when contained in a wide-mouthed vessel than in a narrow one.—M. Charles contributed an elaborate memoir "On a System of Conic

Sections which Satisfy Seven Conditions in Space."—M. Volpicelli sent a note giving the results of "Geometrical and Physical Researches upon the Bifilar Magnetometer and Electrometer."

ACADEMY OF SCIENCES.—Sept. 11.—A communication was made by M. Becquerel "On the Hail-Storms of France." The author having been occupied for many years by researches upon the formation of hail, thinks that a better knowledge of this phenomena might be obtained if a large chart were made of all the storms occurring in the different parts of some large country, as in France. This chart M. Becquerel hopes to complete in the course of a year.—M. Leon Foucault sent a supplementary note on his recent paper on a modification of Watt's governor.—A new theorem relating to molecular motions was communicated by Professor Colnet d'Huart, which is stated as follows: In every homogeneous body of constant elasticity, if E represents, at the time t , the velocity of rotation of a molecule, and if the axis x is directed according to the propagation of molecular movement, the velocity of rotation E will be ruled by the differential equation which follows:—

$$\frac{dE}{dt} = K \frac{d^2E}{dx^2}$$

This theorem, which has led the author to unexpected results, especially in its relation to diathermancy, appears to him to be of great importance in the theory of the transformation of heat into work.—M. Jonquières presented a memoir "On the Properties of Systems of Surfaces of any Order."—M. Rilliet described some experiments on the curved form assumed by the surface of a liquid when the vessel containing it is rapidly moved.—A note was contributed by M. Noguès, upon the white marbles found in the countries adjoining the Pyrenees.—Another paper was sent by MM. Leplat and Jaillard, on the disputed point of Bacteridies as the cause or otherwise of the disease known as *sang de rate*.—M. Trécul read a memoir "On the Production of Amyliferous Plantules in Vegetable Cells during Putrefaction." The facts given in this paper show that the organic matter contained in certain cells can be transformed, during putrefaction, to living bodies of a very different nature to the generating species. Mr. Trécul believes that he has discovered in the cells of a plant under examination minute crystals of chlorophyll, of various sizes, and of a bright green colour.—M. Victor Meunier communicated a second note on the question of spontaneous generation. The author remarks that the germs which gave birth to the life he invariably found in decomposing organic matter enclosed in vessels with sinuous necks, were undoubtedly carried over by the air, but thinks that no absolute conclusion against heterogeneity can be drawn from this fact.—M. Lagneau sent a note on the age of feminine puberty in France, considered from an ethnological point of view.—No less than six papers were contributed on different specifics for cholera. In one M. Maurin describes the pseudo-choleraic epidemic which is now raging at Marseilles. The cause of this is attributed to the absence of sanitary arrangements in the populous parts of the town, to the over use of juicy fruits, to cold drinks and poor nourishment. The larger number of cases are among the Piedmontese, who are the most badly fed class.

VIENNA.

IMPERIAL ACADEMY OF SCIENCES.—June 30.—Professor von Haidinger communicated an account received from Professor von Hochstetter, of a meteor which fell near Taranaki, in New Zealand, at two A.M. on the 4th December last. The path of the meteor was from north-west to south-east. It was brilliantly luminous, and appeared at least as large as the sun. Its detonation was very violent. One portion fell into the sea, a small fragment was found to have buried itself in the ground to the depth of nearly two feet. Professor Haidinger also reported upon a band of feather-like clouds observed by him at Vienna on the 17th June.—Professor Hlasiwetz forwarded "Communications from the Chemical Laboratory at Innsbruck," including a paper by Dr. Barth on the constitution of tyrosine, a description by Count Grabourki of a new apparatus for the preparation of anhydrous phosphoric acid; and an account of the production of paraoxybenzoic acid by the fusion of hydrate of potash with carthamine, by M. G. Malin.—Professor Hlasiwetz has detected a new acid, isomeric with cumaric acid, in aloes; he calls it paracumaric acid. The same chemist communicated the results of experiments on the

action of hydriodic acid upon phloroglucine.—A communication was received from Colonel Pechmann in continuation of his former memoir, "On the Deviation of the Plumbline in Astronomical Observations."—Dr. Richard Maly presented a memoir on "Abietic Acid;" Dr. A. Boué concluded his memoir "On the Mineralogico-paleontological Determination of Geological Formations;" and Dr. Karl von Reichenbach communicated the conclusion of his remarks on certain peculiar luminous phenomena observed by sensitive people.—Professor E. Suess read the first section of a memoir "On the Classification of the Ammonites," containing a general introduction and a revision of some groups of ammonites. The *Globosi* and *Ammoni*, with the group of *A. dux*, are formed into a genus, under the name of *Arcestes*; the *Heterophylli*, with the *Ceratites* of the cretaceous formation, form the genus *Phylloceras*; and the *Fimbriati* receive the generic name *Ophiceras*.—M. Joseph Boehm read a paper "On the Parasitic Nature of the Mistletoe," in which he maintains that this plant is not a true parasite, but that it acts merely as a vigorous, but useless, branch of the tree on which it grows.

July 13.—A memoir was communicated from Dr. M. Rohrer, entitled a "Contribution to the Meteorology and Climatology of Galicia."—A photographic picture of the moon, taken by Mr. L. Rutherford, of New York, was exhibited to the meeting, and some remarks were communicated as to its character and the mode in which it was obtained.—Dr. Karl von Reichenbach made some further remarks on the phenomena referred to by him at previous meetings.—M. Ferd. Stoliczka communicated "A Revision of the Gasteropoda of the Gosau Strata in the Eastern Alps."

MUSICAL NOTES.

THE Friday morning's "Messiah" at the Gloucester Festival last week was one of the most impressive musical performances ever given in a cathedral. The vast building was filled to overflowing; choir, aisles, and transepts—places from which not a glimpse of the performers can be got—were alike thronged. Three thousand people were present, according to the returns, and the attention with which every one listened to the music was deep and earnest. 377l. after this performance alone was collected for the charity.

THE 22nd of next month is the date mentioned for the opening of the English Opera at Covent Garden, and "L'Africaine" is to be the first piece.

THE long series of representations of "L'Africaine"—it had already passed its half-hundredth night—is now being broken by an occasional inroad upon the old repertoire. "Masaniello" was done once last week. Signor Tamberlik, by the way, is to be the *Vasco de Gama* of the winter season at St. Petersburg. Few London opera-goers would be sorry to hear of his coming to Covent Garden in the spring.

MISS JOSEPHINE SHERRINGTON, a younger sister of Madame Lemmens, has lately made her *débüt* as a concert singer. Her voice is described by a musical contemporary as a "soprano of the finest and sweetest kind."

M. BAGIER announces "Crispino e il Comase," the comic opera of the brothers Ricci, which made such a hit last winter, as the piece with which he commences the new season at the "Italiens."

THIRTY thousand listeners, according to a foreign paper, assisted at a concert lately given in the Prater at Vienna, by the Orpheonists of the place.

Mlle. ADELINA PATTI is engaged to sing at the Pagliano Theatre, in Florence, in November.

SIGNOR MARIO and Madame Grisi are to appear presently, it is stated, on the boards of Her Majesty's Theatre, along with some members of Mr. Mapleson's regular company, in a few representations of Italian Opera.

GEORGE LINLEY, the composer of many hundreds of pretty drawing-room ballads, died on Sunday week.

THE last volume of the new edition of M. Fetis' "Musical Dictionary" has now been issued. Whatever may be the failings of the Brussels professor as a historian, he is at least to be lauded for his industry. Five years have sufficed for a reissue, in a considerably augmented form, of this bulky work. Till a better magazine of musical history appears, the "Biographie Universelle" of M. Fetis has a right to a place on the shelves of every musician.

POPULAR ENTERTAINMENTS.

THE music-halls noticed last week form but a portion of the public entertainments of the metropolis, although they must be acknowledged to be the most popular and diffused places of public resort. The other chief places of entertainment may be divided into those devoted to music and those devoted to the drama. The pure concert-rooms are not many in the metropolis. The Hanover Square Rooms, the Beethoven Rooms, in Queen Anne Street, the St. James's Hall, and Exeter Hall, and the two opera houses, Covent Garden, now occupied by Mellon's Concerts, and Her Majesty's Theatre, opened very fitfully as to season, are the chief. Concerts, indeed, are occasionally given at the various mechanics' institutions which survive, such as the Marylebone Institution, the old original institution in Southampton Street, Holborn, the Beaumont Institution, and a few kindred places in the suburbs. There can be no doubt that the taste for music in England has taken a more cultivated form; although, contemptuously as the Continentalists have treated our population in this respect, there certainly never was a time in our history when both ecclesiastical and lay music was not popular and rife with us. The air was vocal in Elizabeth's day with madrigals and part songs, and "the spinsters and the knitters in the sun" chaunted the old ditties. In the Stuart period we became more harmonious, and Milton tells us that Lawes "first taught our English music how to span words with just note and accent." Certainly the Cavaliers trolled away, especially after the Restoration, and then came the Italian opera and Italian singing, and Gay and Thomson, as D'Urfey had done before, stood up for old English music, and produced the spirit-stirring and national songs that still raise us up from our seats when we feel our loyalty stirred by the National Anthem, or have our love of freedom aroused by "Rule Britannia." Our ballad opera had nearly a century of popularity; and our native Purcell and our naturalized Handel proved that "the barbarous Briton" could appreciate the noblest music. We must not, therefore, quite fall in with the present fashion, and say that we have just come to be a musical nation. We have, indeed, had our national taste enlarged, and perhaps to some degree refined; and the knowledge of music, as an art, is certainly more diffused. The great and most *recherché* works of the finest composers, and especially of Beethoven, who was five-and-twenty years finding his way to the Philharmonic Rooms, when the most aristocratic musical amateurs presided over that select assemblage, are now welcomed by the vast crowds which fill the Covent Garden Opera House, when Mr. Mellon devotes the evening to some one great composer. The like popularity attends the best music at the People's Concerts at St. James's Hall. It is indeed to be regretted that St. Martin's Hall, so well built and so centrally situated, no longer is devoted to that thorough musical instruction of the people which Mr. Hullah commenced, and so ably carried on. The vast assemblages at Exeter Hall attest the genuine love of sacred music, although some of the popularity it attains may be set down to the fact that thousands who scruple to enter a theatre are delighted to have the opportunity of enjoying that pleasure which pertains to a public entertainment, irrespective of the actual performance. The large choral societies, embracing, happily, both sexes, testify to our love of and our capacity for music of the best kind; and this manifestation is not confined to the metropolis, but shows itself in large associations all over the country. Music, as a means of public entertainment, has certainly greatly spread, and will extend itself much further; and of all modes of entertainment is the least objectionable, producing no immoral sensations, and presenting nothing that can vitiate the mind; unless, indeed, a too great devotion or subjection to it may soften the understanding. In moderation, nothing can be a greater civilizer than music, and it behoves us to do all that is possible for its diffusion and its popularization. Looking at it as a part of the public entertainments of the people, we must rest satisfied with its development, and with the vigorous progress it is making.

Dramatic entertainments seem, probably on account of their having so many large buildings especially devoted to them, to hold the most prominent place amongst our entertainments, but it may be doubted if they really entertain or receive so many persons as the musical institutions. There are at present twenty-four theatres in London, capable of containing 38,000 people nightly. They are, however, by no means all open together all the year round, as the music-

halls are; and as they vary a good deal in the numbers that attend them, they do not entertain near so many visitors as the music-halls, not reckoning the other purely musical rooms and houses. Indeed, we have included the two great operatic houses, Her Majesty's and Covent Garden, which only occasionally give dramatic entertainments. The twenty-two theatres proper are indeed only to be considered, and a brief review of them will show what kind of dramatic entertainment is given to the metropolitan public.

Drury Lane Theatre has withstood many vicissitudes, and has a two centuries' character to uphold it. The history of it would mark all the vicissitudes of the national theatrical taste. It is something to say for the theatre and for the nation, that it opens this very evening with a play by Shakespeare, and a spectacle by Milton. "Macbeth" and "Comus" are truly national works, and it says something for the steadiness of the mental faith, that with the infinite variations of tastes that have occurred in the 250 years since these works of imagination were conceived, the people still adhere to them. Fiction is, after all, more enduring than fact, for certainly of the laws, customs, and manners of the country as they existed when these poems were issued, very little remains unchanged; and yet we find the frequenters of the theatre still listening with awe to the denunciations of the murdering Thane, and enraptured with the grand and mellifluous verse that tells the story of the lady in the enchanted chair. Some credit is due to the present poetical manager of Drury Lane, Mr. Falconer, who has indestructible faith in the mental drama and genuine poetry.

The fickleness, however, of public taste is shown elsewhere in as strong manner as its persistency is at Drury Lane; for at no other of the twenty-two theatres is the old form of drama played. Two of the theatres are devoted to music, to the exclusion of the drama, unless pantomime be included in the definition of it. The didactic, descriptive, heroic old drama is entirely eschewed, and the character and epigrammatic comedy also. People no longer go to the theatre to learn, and very much prefer to laugh; but as that is an exercise that cannot be uninterruptedly pursued, they alternate their emotion with a wonder which excites, and with a glitter which dazzles the eye, but cannot satisfy the mental taste. In the place of the old epic tragedy and moralizing comedy, we have transcripts of actuality, in which the lowest effort of the mind to acknowledge art is exercised in recognizing the reproductions of real scenes and occurrences. This species of drama is now produced in its greatest perfection at the Princess's, where Mr. Boucicault, both as actor and author, presides over his latest production of this kind, "Arrah-na-Pogue," in which real Irishmen, with a natural brogue, play the peasants, and in which all the accessories are real and all the sentiments fictitious. There is nothing to be said against this kind of drama, except that it is a mere mirage of the theatre, that signifies nothing, although there is a good deal of sound and fury in it.

What the Princess's does well several other of the theatres do with various grades of inferiority, and most of them with a difference peculiar to their own boards. The Lyceum, under Mr. Fechter's management, has imported the Parisian notions of reality, in which stubborn theatrical conventions so jostle actual realities, that there is no discerning their difference, and the mind loses its sense of actuality. What Mr. Fechter will do with so poetical and emotional a story as "Lucia di Lammermoor" we cannot say; but we may be sure the actualities will be there, even to the old Scotch dogs and hunting gear. We only hope he will not put *Ravensthorpe* on horseback, as he has so often mounted his heroes.

The Haymarket is *sui generis*, and hardly falls into the realistic system. Yet its greatest success has been a character mosaiced out of a number of minute facts, and so carefully actualized (we prefer this awkward word to realized), that it has become the wonder of the theatrical world, and has been repeated till every boy in the streets mimics the stutter and the stumble of my *Lord Dundreary*. Variations of this popular character have been the chief adjuncts of Mr. Sothorn's career. The Haymarket has always had a character for comedy, first given to it by Foote, continued by Colman, and not unworthily upheld by Buckstone. Chained to Mr. Sothorn's delineations, it seems to be circumscribed by his potent but narrow genius. Comedy proper, however, will be for a short time restored to it by the advent of Mr. and Mrs. Charles Mathews, and the adaptation of a French play by Mr. Leicester Buckingham.

St. James's seems to respect its courtly situa-

tion, and brings out genteel French pieces and pretty burlesques. We thus at least get clever, if not very accurate, delineations of real life, and always have a story well told, with an *imbroglio* that is interesting. It last season was under the management of one of the most graceful of our actresses—Miss Herbert—and, we presume, will reopen under her direction.

The Adelphi, notwithstanding it has been rebuilt, cannot get rid of its peculiar kind of drama, although the quality of its pieces is considerably modified. Broad farce and deliberate murder were its principal ingredients. These are now elevated by the genius of Mr. Toole and of Mr. Jefferson at the present moment into fine comedy acting; and the horrors are abated in proportion as the portraiture of genuine character is developed. It is much to be regretted that Mr. Webster does not exercise his art, of which he is an undoubted master—especially as he is a much better actor than manager.

The Olympic, after gaining celebrity for the elegant and the fantastic, with a dash of the real, as exemplified by the genius of Robson, has settled down into the realistic drama, and all the actualities of existence are cleverly portrayed by its clever company and intelligent manager, Mr. Horace Wigan. It must, however, be acknowledged that there are symptoms of this kind of theatrical fare losing its charm.

The Strand goes in for frolic and fun, with a tinge of the theatrical pathetic. The cardinal object here is to avoid dullness, to string up the animal spirits to the highest pitch, and to keep them there, regardless of criticism or cynicism. In this whirl of merriment folly rather than gaiety is sometimes attained, and all the more serious habits of the mind are obliterated. A hypochondriac would be driven to frenzy by the turbulence of the fun and the violence of the merriment. Let no one enter here who is not determined to be joyous. Reflection might find plenty to sigh at, but then *bijou* theatres are not places to reflect in.

The New Royalty might last season have been called a younger sister of the Strand, but this year it has added a grace to its performances by the introduction of music. Operettas may be silly, but they are seldom coarse.

The Prince of Wales's, now a kindred theatre to the foregoing, has been raised, by the wit of Mr. Henry Byron and the piquant acting of Miss Marie Wilton, to a level with the mental theatres. Burlesque is still the staple article, though little scenes of real life called comediettas vary the eternal glitter and word-catching of the former species of drama.

The theatres frequented by the populace are the three over the water—Astley's, Victoria, and the Surrey (now rebuilding); the six to the North of London—Sadler's Wells, the Grecian, the Britannia, the Standard, the City Theatre, and the Alexandra; the three to the East—the Pavilion, the Garrick, and the Effingham, and one in the far West—the Marylebone. These theatres, devoted more especially to the people, and greatly frequented by veritable artisans and their families, are not conducted on the best æsthetic principles. Either they are dosed with ranting tragedians who mouth the Shakespearian drama, or with stage versions of the penny literature of the day, in which lords and dukes, factory girls and countesses, murderers and philanthropists, move about in a maze of mystery, and talk a jargon which the novelists must know is not natural to any portion of humanity. Now and then a clever piece from the French or an adaptation of a well-written novel produce something that is tolerable. As, however, the ignorant are very confiding or indifferent as to artistic matters, this system is successful. A really popular drama might, however, be created which would somewhat develop in a right direction the tastes of these audiences. Mr. Phelps, in his ten years' management of Sadler's Wells, undoubtedly did this in a remarkable manner, and is a standing example of what a well-directed public entertainment can effect.

This is but a rough view of the dramatic portion of public entertainments; but it shows sufficiently the tendency of the public taste, and of the intelligence of those who undertake to provide for it. The result, to us, seems only to prove the truth of the principle that in matters of taste supply must precede the demand. The Government and the governing class should do more to cultivate and improve the public entertainments.

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